



County Borough of Southampton.

Annual Report

ON THE

HEALTH OF SOUTHAMPTON

FOR THE YEAR 1904,

BY

R. E. LAUDER, F.R.C.S., Ed., D.P.H.,

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Medical Superintendent of the Borough & Port Fever Hospitals.

Southampton :

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70, ABOVE BAR.

By the order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall "prepare an Annual Report to be made " to the end of December in each year, comprising a summary " of the action taken during the year for preventing the spread " of disease, and an account of the sanitary state of his district " generally at the end of the year. The report shall also " contain an account of the enquiries which he has made as to " conditions injurious to health existing in his district, and of " the proceedings in which he has taken part or advised under " the Public Health Act, 1875, so far as such proceedings relate " to those conditions ; and also an account of the supervision " exercised by him, or on his advice, for sanitary purposes over " places and houses that Sanitary Authorities have power to " regulate, with the nature and results of any proceedings which " may have been so required and taken in respect of the same " during the year. It shall also record the action taken by him, " or on his advice, during the year in regard to offensive trades " and to factories and workshops. The report shall also contain " tabular statements (on forms to be supplied by the Local " Government Board, or to the like effect) of the sickness and " mortality within the district, classified according to diseases, " ages, and localities."

COUNTY BOROUGH OF SOUTHAMPTON.

1904.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

TO THE MAYOR, ALDERMEN, AND COUNCILLORS.

MR. MAYOR AND GENTLEMEN—

I have the honour to submit for your consideration the Annual Report upon the condition of the Public Health and a record of the Public Health work carried out in the Borough during the year 1904, together with the statistical details, and also the action taken under the Factory and Workshop Act, 1901.

The death rate recorded, 13·83, was again exceedingly low when compared with previous years. This is slightly lower than the death rate last year, and is the lowest yet recorded in the borough.

Southampton appears eighth on the list, issued by the Registrar General in his Annual Summary, of the 76 great towns in England and Wales in the order of their corrected death rate, compared with thirteenth place in last year's list. The towns with a lower death rate are under 100,000 population, with the exception of two residential districts within the Metropolitan area.

The comparative mortality figures of the large towns on the South Coast for the year 1904—taking the death rate of England and Wales as 1,000, were as follows:—

Hastings	...	...	...	..	779
Southampton	...	...	...	..	842
Devonport	..	...	...	..	867
Bournemouth	...	...	...	..	885
Brighton	...	...	...	..	1,008
Portsmouth	...	...	...	..	1,066
Plymouth	...	...	..	..	1,114

A most satisfactory feature of the year under review was the decrease in the number of cases of enteric fever occurring in the Borough. Only 19 cases were notified, compared with 148 in the previous year, and was the lowest number notified in any one year since the Infectious Disease (Notification) Act has been in force.

The zymotic death rate was also the lowest recorded for several years.

I am, Mr. Mayor and Gentlemen,

Your obedient Servant,

R. E. LAUDER,
Medical Officer of Health.

R E P O R T .

STATISTICAL SUMMARY FOR THE COUNTY BOROUGH OF SOUTHAMPTON.

Acreage	...	...	...	...	...	4,501
Population (estimated 1st July, 1904)						112,500
Number of persons per acre	...	...	...	...	...	25
Number of houses inhabited (census, 1901)	...					19,843
Rateable value (October, 1904)	...	...	...	...	...	£562,737
Births	...	...	...	...	...	3,003
Birth rate	...	...	...	...	...	26.8
Deaths	...	...	...	...	...	1,551
Death rate	...	...	...	...	...	13.83
Do. from zymotic diseases	...	...	...	...	...	1.00
Average death rate (9 years, 1896-1903)						16.45

POPULATION.

According to the census returns the population for the whole Borough on the 1st April, 1901, was 104,824, and the estimated population for the present year is 112,500, as follows:—

	Estimated.	Population. Census.	Houses Occupied.	Persons per House. Census, 1901.
Town Proper	...	62,000	61,319	5.63
Portswood and Bitterne Park	20,750	17,958	3,594	4.99
Shirley, Freemantle and Millbrook ...	29,750	25,547	5,362	4.76
<hr/>				<hr/>
112,500				

From the returns issued by the Borough Engineer's Department, it appears that 736 new houses have been completed for occupation between June, 1902, and December 31st, 1904. Particulars of the number of houses completed before June, 1902, are not obtainable, but allowing for their having been erected at the same rate as they have been since that date, it is estimated that nearly 1,100 houses have been erected since the last Census (April, 1901).

In December, 1904, an enumeration of the void property in the Borough was made by the Health Department. It was found that there were 218 more houses vacant than at the Census in 1901. Deducting this number from the new houses completed for occupation (1093), the increase in the number of occupied houses in the Borough at the end of 1904 compared with the Census, 1901, is 875; viz:—

District.	Unoccupied Houses, Census, 1901.	Unoccupied Houses, Dec., 1904, as per enumeration by Health Department.	No. of such Houses at an estimated rental of £25 or under.	New Houses completed from Census, 1901, to Dec. 1904 (estimated from Apr., 1901, to June, 1902).	Increase in number of occupied Houses compared with Census, 1901.
Town	238	299	158	22	Decrease 39
Portswood and Bitterne Park.	207	239	176	420	Increase 388
Shirley, Freemantle, & Millbrook.	198	323	227	651	,, 526
	643	861	561	1,093	Increase 875

TABLE showing Acreage, number of Inhabited Houses, and Population according to Census, 1901, and the Death Rates in the Municipal Wards, 1901, 1902, 1903, and 1904.

WARD.	Number of Inhabited Houses.	Popula- tion.	Number of Persons per Acre.	Average for Three Years, 1901-2-3.			Death Rate of Infants under 1 year of age per 1000 of the population.
				Death Rate from Zymotic Diseases.	Total Death Rate.	Death Rate under 1 year of age per 1000 of the population.	
1. Town	64	954	5,775	90.2	1.20	1.63	16.92
2. St. James	84	1,244	7,590	90.4	1.71	2.04	19.74
3. St Marys	88	1,334	9,222	104.8	2.50	1.31	18.65
4. All Saints	178	1,255	6,584	37	1.18	1.42	15.44
5. Trinity	68	1,192	6,243	91.8	1.70	1.77	17.25
6. Northam	145	1,614	9,543	65.8	2.56	1.61	18.70
7. Nichols Town	79	1,456	7,374	93.1	0.67	1.87	15.19
8. Newtown	91	1,410	7,085	77.9	0.52	1.77	13.22
9. Bevois	184	1,624	7,795	42.4	0.79	0.90	12.63
10. Portswood	864	2,398	12,066	14	1.07	0.79	12.12
11. Banister	379	1,568	7,579	20	1.13	0.79	12.21
12. Freemantle	540	2,426	11,544	21.4	1.88	1.11	14.52
13. Shirley	962	1,368	6,424	6.6	1.76	0.74	14.67
Total	19,843	104,824	23.4	1.47	1.32	15.31	3.82
						1.00	1.22
						13.83	3.07

BIRTHS.

The number of births registered in the Borough for the year was 3,003, compared with 3,165 in 1903.

The excess of births over registered deaths was 1,413, and the birth rate 26.8 per 1,000. This is the lowest birth rate recorded in Southampton and is 2.8 lower than the average for the previous ten years.

Town Proper	...	...	1,677	births	...	27.1	per 1,000
Portswood & Bitterne Park	525	„	„	„	25.4	„	
Shirley, Freemantle & Mill- brook	...	...	801	„	...	27.0	„

DEATHS.

The number of deaths registered during the year was 1,590; of those 839 were males and 751 females, giving a death rate of 13.8 for the whole Borough, as compared with 13.9 the previous year, and 16.2 for England and Wales in 1904.

Of the 1590 deaths 298 occurred in public institutions, viz.:—13 in the Fever Hospital, 115 in Royal South Hants and Southampton Hospital, 34 in the Workhouse, 133 in Workhouse Infirmary, Shirley Warren, 2 in Children's Hospital, Shirley, and 1 in the Free Eye Hospital.

In estimating the death rate, we have to subtract from the total 65 deaths which occurred amongst non-residents, and add the deaths of 26 persons who belonged to the Borough but died in the South Stoneham Workhouse.

The death rate in each of the three Registration Districts of the Borough per 1,000 of the population is as follows:—

Town Proper	...	...	...	...	15.07
Portswood and Bitterne Park	...	...	...	...	11.84
Shirley, Freemantle and Millbrook	...	...	...	...	12.65

Infantile mortality, or death rate among infants under one year of age is again considerably lower than the average, being 114 per 1,000 births, and was the same as in 1903, but is 26 below the average for twenty years.

Town Proper	...	...	121.6	per 1,000 Births.
Portswood and Bitterne Park	...	...	91.4	,,
Shirley, Freemantle and Millbrook	...	...	114.8	,,

ZYMOTIC DEATH RATE

Is estimated on the number of deaths caused by the seven principal zymotic diseases, viz. :—small pox, scarlet fever, typhoid fever, measles, diphtheria, whooping cough and diarrhoea.

The death rate for the year amounted to 1.00 as compared with 1.31 for 1903, and 1.94 for England and Wales in 1904.

ZYMOTIC DISEASES.

Small-pox.—Only one case of Small-pox occurred in the Borough during the year, the disease being introduced into the Town by one of H.M. Transports from Bombay. The following are the particulars :—(F. S.), aged 24 years, vaccinated in infancy, residing at Lower Bridge Road, removed to hospital on April 6th, suffering from modified Small-pox. He was a steward on S.S. "Assaye," and had been attending A. M., who was removed from the vessel suffering from Small-pox on March 26th, and whose case is referred to in the Port Annual Report.

The case had been under observation as a contact, and was removed at the earliest manifestation of the disease. Vaccination and thorough disinfection were carried out at his residence, and all possible contacts kept under observation. No further case occurred.

Scarlet Fever.—One hundred and thirteen cases were notified in the Borough during the year, as compared with 427 cases during 1903; Freemantle and Portswood returning 26 and 17 cases respectively.

The method of treatment adopted in 1903 and reported in my Annual Report for that year, has been carried out during 1904, viz. :—the separation of acute, discharging, and convalescent cases from each other, and where possible treating each case in a separate ward, followed by a week's detention in a specially prepared room.

The new method has comparatively freed us from complications, and reduced the period during which the patient has to be kept in Hospital. No case of diphtheria or mastoid trouble occurred.

The number of cases suffering with two diseases on admission, or where a second developed shortly after admission, or the original diagnosis proving on observation to be inaccurate, is in itself a strong reason why each person suffering from an infectious fever should be treated in a separate room.

The statistics of results obtained under the different methods are given in the subjoined Table A. During 1902 no case was discharged from hospital until peeling had ceased, but during 1903 and 1904, I have acted on the belief that the infection is carried in the respiratory tract, that the constitutional condition and particularly the rash, are only the result of toxic products, and that the desquamation of the skin is not *per se* a source of danger.

TABLE A.

Year.	Cases notified.	Removed to Hospital.	Discharged from Hospital.	Average period in Hospital. (Days).	No. caus. return cases.	Cases treated at home.
1902	261	208	164	48	7	53
1903	427	353	325*	34	7	74
1904	113	102	120	26.7	2	11

*This total includes the discharge of cases actually notified and admitted during the year, and does not include those cases remaining in Hospital at the end of 1902, but discharged in 1903, such cases not having been submitted to special treatment.

Table (A) compares under various headings the work of 1902, under the old system, with the work for 1903 and 1904, under the altered methods. In 1902 the average period of detention in hospital was 48 days, as compared with 34 days in 1903 and 26·7 days in 1904, being a reduction of 14 and 21 days respectively on the average stay in hospital during 1902. The two return cases representing a percentage of 1·67, compare favourably with those occurring in 1902, when the percentage was 4·27, and 1903, when it was 2·15, showing that the longer period of detention under the old method did not remove, but rather increased, the possibility of carrying away infection.

As the respiratory passages are now regarded as the chief source of conveying infection, particular attention has been given to them, and steps taken to remove any unhealthy condition before patients are discharged from hospital.

Twenty-seven operations were performed during the year, 4 for the removal of tonsils, 1 for post-nasal adenoids, and 22 in which the tonsils and also post-nasal adenoids were removed, or post-nasal pharynx or eustachian pad scraped. Of the above, 12 had discharges on admission, 10 developed discharges shortly after admission, and five were free from discharges, but had an unhealthy condition of the respiratory passage.

The average stay in hospital of patients suffering from discharges and operated on was 30·4 days. Of the 22 that were operated on with discharges the following shows the number of days within which the discharges ceased in 20 of the cases after operation:—

8 within 1st day		1 on 10th day
2 on 3rd ,,		2 ,, 13th ,,
1 ,, 4th ,,		2 ,, 15th ,,
1 ,, 5th ,,		1 ,, 18th ,,
1 ,, 6th ,,		1 ,, 19th ,,

The percentage of cases suffering from discharges in hospital would appear large, but the upper respiratory passage in every case is carefully examined, and what under ordinary circumstances would not be regarded as a discharge, is considered so under the present treatment. Thinking it would be of interest to compare them with cases treated at their own homes, I obtained through the courtesy of medical men in attendance, particulars of the 11 cases isolated at home during the year, with the result that three were stated to have had discharges from the nose and ears, and enlarged tonsils, three cases were stated to have been of a very mild character, and the other five cases were stated to be ordinary cases without complications.

Sixty-three cases of Scarlet Fever occurred amongst children attending the public schools, and three amongst children attending private schools.

Enteric Fever.—Nineteen cases of Enteric Fever were notified during the year, being a decrease of 129 as compared with 1903. In addition to these, 9 cases of Enteric Fever were brought into the Borough for treatment at the Royal South Hants and Southampton Hospital; there were also 15 cases from vessels arriving in the Port received into the Isolation Hospital for treatment.

Only one death occurred amongst the nineteen cases referred to above.

Owing to a large number of cases during 1903 having been attributed to bathing on the foreshore or eating shellfish collected on the Mudlands, the Chief Constable and the Secretary of the Education Committee were communicated with and requested to exercise their influence in preventing persons from collecting shellfish or bathing or wading on the foreshore.

It will be observed from the following list that only two cases

occurred in the district of Northam, and none in the St. Mary's Ward :—

Date Notified.	Name.	Address.	Age.	Remarks.
Jan. 2	W. C.	*Royal South Hants and Southampton Hospital Lodge Road	14 years	Removed from Pear Tree Green
,, 11	M. S.		5 "	Drains found defective ; patient had eaten watercress
,, 14	C. D.	Avenue Road	8 "	Drains found defective
,, 14	G. D.	Ditto	6 "	Ditto
,, 29	P. A. H.	Royal South Hants and Southampton Hospital	7 "	Patient removed from Carlton Place
May 2	S. E. C.	*Ditto	34 "	Removed from Woolston
J ⁿ e 19	A. C.	Winton Street	10 "	
J ⁿ e 14	H. P.	French Street	27 "	Patient had been on a visit to London, returned to Southampton ill
,, 17	E. H.	Stafford Road	24 "	Ditto
,, 23	E. G.	Duke's Road	15 "	Patient was a servant at Gordon Avenue ; drains tested at the house, and found in a defective condition
July 1	M. M. S.	Millbank Street	4 "	
,, 14	K. L. A.	Incorporation Infirmary	19 "	Patient was a servant at Refreshment Rooms, Above Bar ; had eaten tinned salmon before illness
,, 30	R. H.	*Royal South Hants and Southampton Hospital	15 "	Removed from Itchen
,, 30	K. H.	*Ditto	12 "	Ditto
,, 30	W. H.	*Ditto	7 "	Ditto
Sep. 6	A. H.	*Ditto	10 "	Ditto
,, 17	E. B.	Mount Street	7 "	Patient had been eating crabs, and playing in the street near sewer, which was under repair
,, 18	A. H.	*Royal South Hants and Southampton Hospital		Removed from Itchen
,, 18	S. V.	*Ditto	33 "	Removed from Woolston
,, 22	J. H. S.	Bevois Street	6 "	
,, 30	J. F.	Bell Street	12 "	Patient had been playing in the street near sewer, which was under repair
Oct. 3	E. E. W.	Wheeler's Court	8 "	The drains in the Court were being relaid, at the time
,, 7	T. L. H.	Canal Walk	10 "	Patient had been eating cockles. Drains found in a defective state.
,, 9	B. A. K.	New Road	24 "	Patient had been on a visit to Sunderland ; ill on arrival home.
,, 9	W. E. K.	Ditto	22 "	Contracted disease from previous case.
Nov. 2	C. P.	*Royal South Hants and Southampton Hospital	37 "	Patient removed from Woolston.
,, 6	M. C. S.	Ditto	10 "	Patient removed from Highfield.
,, 9	L. A. S.	Ditto	8 "	Ditto.

* These cases were notified, but as they were removed to the Borough for treatment they are not included under the notifications of infectious disease occurring in the Borough.

DIPHTHERIA.

One hundred and fifty-eight cases of Diphtheria were notified during the year, as compared with 239 during 1903. The largest numbers 42, 24 and 23 cases occurred in Portswood, Shirley, and Freemantle Wards respectively.

Ninety-eight cases occurred amongst children attending public schools, the largest numbers being 20 and 15 in the Bitterne Park and Foundry Lane Schools respectively. Eleven cases occurred amongst children attending private schools.

There were 12 deaths in the Borough during the year, giving a case mortality of 7·60 per cent.

MEASLES.

The Borough was again remarkably free from Measles during the year, no death whatever being registered from the disease.

WHOOPING COUGH.

Whooping Cough was responsible for 16 deaths, as compared with 29 during the year 1903.

DIARRHŒA.

Diarrhoea was more prevalent than in the previous year, 82 deaths being registered as due to this disease. Fifty-four of these were under the age of one year, compared with 48 in 1903 and 18 in 1902. The highest mortality in proportion to the population occurred in Trinity and Northam Wards as will be seen in the following Table:—

1904 (52 weeks ending 31st December, 1904).—TABLE showing the number of Cases of Scarlet Fever, Diphtheria, and Enteric Fever, and Deaths from Measles, Whooping Cough, and Diarrhoea occurring in each week, tabulated according to the Municipal Ward in which such Cases or Deaths occur.

s Ward includes 6 deaths from Diarrhoea that occurred in the Workhouse or Workhouse Infirmary, Shirley.

Cases of Diphtheria and Typhoid Fever notified during the year in the different Wards in the Borough with Sanitary defects found and remedied.

TUBERCULOSIS.

One hundred and thirty-seven deaths occurred from tuberculosis during the year, as compared with 124 during 1903, 161 in 1902, and 140 in 1901.

In 33 houses where deaths occurred the rooms and bedding were disinfected by the Sanitary Authority; 19 rooms were cleansed by the occupiers, but in the remaining cases the occupiers refused to take extra precautions.

The following sanitary defects were found in the houses where deaths occurred :—

Number of defects.	Sanitary defects in 34 houses in which deaths occurred.	Result.
5	Drains found choked and defective ...	Obstruction removed and drains repaired.
4	„ untrapped ...	Drains retrapped.
2	Waste pipes of sinks direct to drain	Waste pipes disconnected from house drains.
3	Ventilating shafts of drains defective	Repaired.
9	No water to closets for flushing ...	Efficient supply of water provided to closets.
4	Broken pans of water closets ...	New pans fixed.
9	Yards unpaved ...	Yards paved.
13	Yards with paving defective	Yard paving repaired.
10	Guttering under roofs of houses defective	Guttering repaired.
24	Walls and ceilings of houses dirty	Houses cleansed and whitewashed.
5	Roofs of houses defective	Roofs repaired.
31	Sanitary dust bins required	Provided.
2	Dilapidated water closets	Water closets repaired.
6	Broken sinks in houses	New sinks fixed.
6	Want of ventilation underground floor rooms of houses	Ground floor ventilation provided.

G. H., a Corporation employé, suffering from Tuberculosis, was admitted to the Isolation Hospital on the 3rd May. He was discharged 3rd July. His weight increased in four weeks from 6 st. 9 lbs., to 7 st. 6½ lbs. During the fifth week he developed ischio-rectal abscess, from which time there was no improvement in condition. The condition of the lungs was bad on admission and did not much improve up to time of discharge. From the commencement there was practically no hope of permanent improvement.

ISOLATION HOSPITAL.

CASES ISOLATED FOR TREATMENT.

This Table includes all admissions to the Isolation Hospital and Hospital Ship, and also includes cases removed from vessels in the Port, and cases admitted from neighbouring districts.

DISEASE.	Remaining in Hospital 1st Jan., 1904.	Total Number of Admissions	Actual cases admitted as diagnosed at Hospital.	Cases admitted proving not to be disease notified.	Discharged.	Died.	Remaining in Hospital 31st Dec., 1904.	Average duration of stay. Cases discharged.	Case Mortality (per cent.) actual cases.
Small Pox
Scarlet Fever	23	104	104	...	115	*2	10
Diphtheria	11	117	113	4	116	6	6
Enteric Fever	7	23	19	4	27	2	20·7
Measles	3	3	...	3	...	5·31
Suspected Plague...	1	...	1	1	...	...
Chicken Pox	1	2	2	...	3	...	...
Sleeping Sickness...	4	4	...	4	...	...
Tuberculosis	1	1	...	1	...	...
Cases admitted for observation for	Scarlet Fever	...	12	...	...	12	11	...	1
	Diphtheria	...	11	...	...	11	10	1	...
	Enteric Fever	...	7	...	...	7	4	3	...
Contacts - Measles	1	...	...	1	...	...	...
Contacts Scarlet Fever	1	...	...	1	...	...	...
Totals	...	42	291	250	39	301	14	18	..

* One of these deaths occurred on December 30th, but was not registered until week ending January 7th, 1905, and therefore does not appear in the mortality returns.

Comparitive Mortality of cases occurring in the Borough, treated
in Hospital, and at Home

Disease.	Whole Borough.		Treated in Hospital.		Treated at Home.	
	Total Number of cases notified.	Case Mortality, per cent.	Number of cases notified admitted to Hospital.	Case Mortality. per cent.	Number of cases notified treated at Home.	Case Mortality. per cent.
Scarlet Fever	113	1.77	102	1.95	11	0.0
Diphtheria	158	7.60	116	5.17	42	14.29
Enteric Fever	19	5.26	7	0.0	12	8.33
Totals	290	5.17	225	3.55	65	10.77

1905.

ISOLATION HOSPITAL AND HOSPITAL SHIP.

TABLE SHOWING SOURCE OF CASES ADMITTED.

Disease.	Town.	Ports-wood.	Shirley.	Cases occurring amongst Hospital Staff.	Removed from other Districts.	Imported by Vessels.	Totals.
Small Pox.	1	...	...	...	...	3	4
Scarlet Fever.	57	13	32	...	1	1	104
Diphtheria.	42	29	45	...	1	...	117
Enteric Fever.	6	...	1	1	...	15	23
Measles.	...	...	...	...	...	3	3
Suspected Plague.	...	...	...	...	...	1	1
Chicken Pox.	..	...	...	...	...	2	2
Sleeping Sickness.	...	...	...	...	...	4	4
Tuberculosis.	...	1	...	...	...	...	1
Cases admitted for observation, for	Scarlet Fever.	10	1	1	...	...	12
	Diphtheria.	5	3	3	...	...	11
	Enteric Fever.	4	...	3	...	...	7
Contacts. Measles.	...	...	...	...	...	1	1
,, Scarlet Fever.	...	...	1	...	...	...	1
Totals.	125	47	86	1	2	30	291

TABLE.

PAYING PATIENTS ADMITTED.

Scarlet Fever	...	...	...	...	2
Diphtheria	...	...	...	...	6
Enteric Fever	...	...	...	...	5
Measles	...	...	...	...	1
Small Pox	...	...	...	...	3
					<hr/>
					17
					<hr/>

TRACHEOTOMIES IN 1904. (ISOLATION HOSPITAL).

Tracheotomy was performed in 5 cases, with two deaths, of which the following are particulars :—

Name.	Was Diphtheria the cause of obstruction.	Result	If death, No. of days after operation.	Cause of Death.
W. D.	No.	Died.	3	Broncho-pneumonia.
E. C.	Yes.	Died.	1	Syncope.
H. M.	„	Recovered		
E. G.	„	do.		
J. H.	No.	do.		

BACTERIOLOGY EXAMINATIONS.

The aid of bacteriology has been applied to the diagnoses of the cases in the hospital.

In the case of diphtheria patients, more than 350 examinations were made.

The Widal test was used in all the enteric cases admitted viz : 30.

During the year all scarlet fever cases were examined for the purpose of excluding diphtheria.

In addition to the above, the laboratory has been used for investigating the source of spread of diphtheria and enteric fever, and, at the request of medical practitioners in the Borough, as an aid to the diagnoses of doubtful cases, viz:—

Widals ...	...	...	8.
For Tubercl bacilli	...	...	6.
For Diphtheria bacilli	...	...	20.

SLEEPING SICKNESS.

Four cases of sleeping sickness were admitted from the s.s. "Anversville" on May 22nd. The cases were brought from the West Coast of Africa and were on their way to the Liverpool School of Tropical Medicine. While in hospital trypanosomes were found in the blood and cerebro-spinal fluid in each case.

DEATHS FROM DIPHTHERIA IN HOSPITAL.

Name.	Age (Years).	Day of Disease on Admission.	Antitoxin before Admission.	Day of Disease at death.
I. W.	2	5	No.	6th
E. M.	7	5	„	12th
D. B.	7	6	„	7th
W. A. H.	3	5	„	5th
E. C.	2	7	„	8th
R. W.	6	10	„	16th

Patients admitted with two Diseases during 1904.

Name.	Date of Admission.	Diseases on Admission.	Remarks.
H. S.	Jan. 30th	Diphtheria and Scarlet Fever	No resulting case.
R. W.	Aug. 10th	do.	do.
G. G.	Sept. 14th	Diphtheria and (convalescent) Chicken-pox	do.

Diseases developed while in hospital during 1904.

Name.	Date of admission.	Diseases on admission.	No. of days in hospital when disease developed.	Disease developed in hospital	Remarks.
W. T.	Feb. 18th	Diphtheria	9	Chicken-pox.	Fresh crops of vesicles appeared till March 3rd. Patient was removed, on appearance of vesicles to separate ward and the ward in which she had been was disinfected.
O. M.	Mar. 1st	do.	15	Chicken-pox.	
M. H.	Sept. 26th	do.	3	Scarlet Fever.	No resulting case.

With regard to the cases of Chicken-pox, no cases had been admitted to hospital as Chicken-pox between January 19th and May 9th. W. T. had evidently been infected before admission, O. M. may also have been infected before admission, as 15 days is not beyond the period of incubation.

Midwives Act, 1902.

The Midwives Act came into operation on 1st April, 1903. Its object is to secure better training and supervision of midwives by the establishment of a system of certification and enrolment of women who are properly qualified to act in that capacity.

Any woman who had been in practice as a midwife for one year at that date can, provided she is of good character, be enroled as a midwife if she claims her right to be registered before 1st April, 1905.

After that date no woman, unless so registered, can take or use the name or title of midwife (either alone or in combination with any other word or words) or that she is a person specially qualified to practise midwifery.

The Act further states that after 1st April, 1910, no woman shall habitually and for gain attend women in child-birth other-

wise than under the direction of a qualified medical practitioner, unless she is certified. Any woman not in practise as a midwife before April, 1903, must undergo the training and pass an examination prescribed by the Central Midwives Board.

The duties of the Local Supervising Authority are :—

- 1.—To exercise general supervision over all midwives practising within their area.
- 2.—To make arrangements to secure a proper inspection of every midwife's case book, bag of appliances, &c., and when necessary, inspection of her place of residence, and an investigation of her mode of practice.
- 3.—To investigate charges of malpractice, negligence or misconduct on the part of the midwife.
- 4.—To suspend any midwife when necessary to prevent the spread of infection.
- 5.—To report to the Central Midwives Board the name of any midwife convicted of an offence.
- 6.—During the month of January in each year to supply the Central Midwives Board with the names and addresses of all midwives registered during the year.
- 7.—To keep a current copy of the roll of midwives, accessible at all reasonable times, for public inspection.
- 8.—To report to the Central Midwives Board the death or change of address of any midwife within their area.

During the year ending 31st December, 1904, 11 certificated midwives notified their intention of practising as midwives within the Borough.

This does not at all represent the actual number of women that were in practice as midwives in the Borough before the passing of the Act. From enquiries made by the Health Department in the early part of 1904, it was found that over 40 women were practising as midwives within this district.

OUTBATHING STATION AND AMBULANCE SHED, WEST QUAY.

The need of a suitable building for bathing and disinfecting persons who have been in contact with infectious disease has long been felt. In many small, overcrowded houses it is impossible to carry out complete disinfection without removing the inmates to a temporary shelter during the time such premises are being disinfected.

It is also necessary that provision should be made for bathing and disinfecting contacts on vessels arriving here with infectious disease on board, as many as twenty persons at one time having occasionally to be removed for this purpose.

Accommodation was further required for suspicious cases of Small-pox occurring in the Town or Port where patients could be removed until diagnosis could be determined, without the trouble and expense of providing a separate staff of nurses and servants on the Hospital Ship should no cases be under treatment there at the time.

It was also essential that a temporary shelter be provided for cases of Small-pox removed from the Town or Port that could not be immediately transferred to the Hospital ship owing to inclemency of weather or the state of the tide. Housing accommodation had further to be provided for the Disinfecto and Caretaker, all the disinfecting work both of Town and Port being carried out on the site at all times of the day and night.

The demolition of the old West Quay Hospital has also long been required for the completion of the Western Esplanade Improvement.

The Hospital Ship having been renovated in the early part of the year and ready to receive patients, a favourable opportunity presented itself for the carrying out of this work. Plans and specifications were prepared by the Borough Engineer, and application made to the Local Government Board to borrow the money.

Sanction was received from the Local Government Board in November to borrow the sum of £1,320 for the provision of an Outbathing Station and Ambulance Shed. The Board stated that

they had deducted from the amount applied for (£1,500) the sum of £180, the estimated cost of temporary Shelter accommodation, in respect of which the Council had no statutory power to borrow.

In January, 1905, a tender was accepted for erecting the buildings at a cost of £1,400.

**Articles disinfected at the Steam Disinfecter,
West Quay.**

Beds and Mattresses	...	...	...	2,179
Bolsters and Pillows	...	..	...	2,702
Blankets	...	...	...	13,826
Sheets	...	...	...	4,160
Counterpanes	...	...	...	789
Sundries	...	...	...	57,231
				<hr/>
				80,887

Dairies, Cowsheds, and Milkshops Order 1885-1886.

There are 202 purveyors of milk, including 14 registered cowkeepers, in the Borough.

During the year 88 purveyors of milk have ceased to sell milk, and their names have been removed from the Register.

The cleansing and limewashing of dairies, cowsheds and milkshops have been carried out in accordance with the regulations and the requirements as to cleanliness strictly enforced.

There are 14 cowsheds within the Borough ; two have been closed during the year as being unfit for use as cowsheds.

Particulars.	Town Proper.	Shirley Freemantle and Millbrook.	Portswood and Bitterne Park.	Total
No. of Cowsheds on Register.	1	6	7	14
„ Purveyors of milk on register ...	118	43	27	188
„ Purveyors of milk registered during the year	24	5	8	37
„ Cowsheds registered during the year ... ... ...	...	...	1	1
„ Cowsheds closed ... ... ...	...	1	1	2
„ Nuisances abated	295	137	116	548

Cowsheds in the County Borough of Southampton.

Name on Register.			Situation.
J. M. ...	...	...	38, Cambridge Road.
F. T. ...	...	...	40, Cambridge Road.
H. A. H. ...	...	...	271, Shirley Road.
T. M. T. ...	...	...	Church Farm, Highfield.
G. H. ...	...	...	Whitedswood Farm, Shirley.
G. B. B. ...	...	...	Mill Farm, Mousehole Lane.
E. S. ...	...	...	The Dairy, Millbrook.
C. B. ...	...	...	“Royal Mail,” Millbrook.
A. B. ...	...	...	Hill Farm, Hill Lane.
C. P. ...	...	...	88, Mount Pleasant Road.
W. P. ...	...	...	Highcrown Street, Highfield
T. W. M. ...	...	...	4, Clarence Street, Northam.
W. P. ...	...	..	Brookvale Farm, Portswood.
W. H. ...	...	...	Manor Farm, Manor Farm Road.

The following Cowsheds have been closed during the Year.

A. F. K. ...	...	...	Aldermoor Farm, Aldermoor.
G. N. ...	...	...	20, Eastfield Road.

The following Cowshed has been registered during the Year.

W. H.	Manor Farm, Manor Farm Road.
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Nuisances Abated in Dairies, Cowsheds, and Milkshops.

Particulars.	Town Proper.	Shirley, Freemantle and Millbrook.	Portswood and Bitterne Park.	Total.
Milkshops cleansed and whitewashed ...	192	66	40	298
Dairies ditto	46	18	14	78
Cowsheds ditto	4	24	28	56
Drains relaid	2	1	1	4
Drains intercepted from sewer and ventilated	1	2	1	4
Inspection chambers provided to drains ...	...	2	3	5
Drain cleared . ... ... ... ..	...	...	2	2
New pans fixed to closets	2	3	1	6
Waste pipes of sinks disconnected from drains	2	1	1	4
Cowsheds paved and drained	1	...	...	1
Yards paved	1	2	1	4
Sanitary dustbins provided to houses ...	27	3	9	39
Drains efficiently ventilated ... ...	...	...	2	2
Dung vaults constructed	1	2	1	4
Stackpipes repaired	3	1	...	4
New sinks fixed in houses ... ... ...	...	1	1	2
Water provided to closets for flushing ...	...	2	...	2
Roofs of houses repaired	3	...	...	3
Animals kept in a dirty state—premises cleansed	1	3	3	7
Manure removed	3	3	5	11
Paving in yards repaired	6	3	3	12
Total	295	137	116	548

SUMMARY OF GENERAL SANITARY WORK.

Inspection of premises after complaint of nuisances, including re-visits	...	...	...	20,108
„ of Slaughter-houses	...	...	...	1,799
„ Dairies, Cowsheds, and Milkshops	...	...	...	1,677
„ Common-lodging houses	...	...	...	3,493
„ Courts, alleys, stable-yards, &c.	...	...	...	955
„ House to House	...	...	...	163
„ Schools	...	...	...	176

General Routine Work.

Nuisances reported by Inspectors	...	...	...	5,563
ditto at the office	...	...	...	567
Preliminary notices served and complied with for abatement of nuisances	...	...	...	1,743
Legal notices	ditto	...	...	1,278
Nuisances abated by verbal notice	...	...	...	3,109
Drains tested with smoke	...	...	...	322
ditto water	...	...	...	283
Found defective after testing	...	...	...	239
Drains found choked, and subsequently cleared	...	...	...	390
Drains reconstructed	...	...	...	274
Drains retrapped	...	...	...	479
Drains intercepted from sewer and ventilated	...	...	...	116
New soil pipes fixed on outside of houses and ventilated	...	...	...	32
Bath and sink waste pipes disconnected from drains and made to discharge over open gully traps	...	...	...	224
Water laid on to closets for flushing	...	...	...	159
Waterclosets in houses externally ventilated	...	...	...	40
Old drains abolished—new drains substituted	...	...	...	9
Waterclosets and urinals reconstructed	...	...	...	27
Premises drained to sewer, Shirley district	...	...	...	11
Stables paved and drained to sewer	...	...	...	11
Pan closets abolished and modern closets substituted	...	...	...	8

New pans fixed to closets	...	...	...	...	285
Cesspools abolished, Shirley district	...	...	...	...	3
ditto cleared ditto	...	...	...	...	9
Paving in back yards repaired	...	...	...	...	286
Back yards paved	...	...	...	...	256
Animals kept in dirty state in close proximity to dwelling house removed	...	...	...	...	38
Overcrowding of houses—numbers reduced	...	...	...	...	8
Courts, water-closets and urinals relimewashed	...	...	...	...	71
Houses cleansed and whitewashed	...	...	...	...	450
Defective roofs of houses and guttering under same, causing damp rooms—repaired	...	...	...	...	599
Manure and offensive matter removed	...	...	...	...	172
Sanitary dustbins provided to houses	...	...	...	...	1,252
Inspection chambers provided to house drains	...	...	...	...	74
Ashpits reconstructed	...	...	...	...	10
Ground floor ventilation provided to houses	...	...	...	...	97
Cowsheds relimewashed	...	...	...	...	56
Milk shops and dairies relimewashed	...	...	...	...	376
Manure vaults constructed	...	...	...	...	23
Fresh air inlet mica valves provided to house drains	...	...	...	...	24
Ventilating shafts of house drains repaired	...	...	...	...	48
Earth closet constructed, Shirley district	...	...	...	...	1
Privies repaired	ditto	...	...	...	7
Damp course provided to houses	...	...	...	...	39
Private roads drained	...	...	...	...	1
Polluted wells closed	...	...	...	...	4
Privies abolished, Shirley & Portswood districts	...	...	...	...	5
Waste pipes fixed to sinks	...	...	...	...	8
Back-yards relimewashed	...	...	...	...	4
Stables ditto	...	...	...	...	2
Houses sub-soil drained and sites concreted	...	...	...	...	2
Stream cleansed	...	...	...	...	1
Slop soil drain provided to house—Shirley District	...	...	...	...	1
Sinks in houses reconstructed	...	...	...	...	138

Houses unfit for Human Habitation.

The following houses have been certified as unfit for human habitation during the year :—

Situation.	No. of Houses.	Date of Notice.	Remarks.
Craven Street	1	Feb. 12	House made habitable
Winton Street	1	„ 12	Ditto
Broomfield Court	2	„ 12	Ditto
Brewhouse Lane	1	Mar. 18	House closed
Sawmill Cut	2	„ 18	Houses demolished
Lime Street	1	„ 18	House made habitable
King Street	1	June 10	Ditto
Bell Street	1	„ 10	Ditto
Wickham Court	2	Sept. 26	Cases before the Justices adjourned <i>sine die</i>
Goater's Alley	6	Dec. 16	Houses closed
King's Terrace, Back of Walls	1	„ 16	House made habitable

POLLUTED WELLS.

Samples of water from 14 wells situated in the Shirley district were submitted to the Public Analyst and found to be organically polluted. Notices were served on the owners and water laid on to the premises from the South Hants Water Co's mains.

SCHOOLS DISINFECTED

Name of School.	Department.	Disease.
Foundry Lane	Infants	Diphtheria
Bitterne Park	Boys and Girls	„

INQUIRIES RESPECTING INFECTIOUS DISEASE.

Four thousand seven hundred and eighty-seven visits were made during the years to houses in which infectious diseases occurred. Inquiries were made relative to source of infection, schools attended, milk supply, &c. Frequent visits were made to houses where cases of infectious disease were nursed at home in order to secure proper precautions being carried out as to isolation and disinfection. Of the cases notified, 233 were removed to the Isolation Hospital for treatment. Sanitary defects were found in 119 houses in which infectious diseases occurred. The majority of

defects being the absence of sanitary dustbins. Notices were served on the owners, who complied with the Sanitary Authority's requirements.

The number of houses disinfected during the year was 351.

FOOD AND DRUGS ACT.

Three hundred and thirty samples were taken by the Inspectors during the year and submitted to the Public Analyst for analysis, as follows:—

Milk	...	...	...	...	...	145
Butter	...	...	...	...	...	78
Coffee	..	...	...	...	...	12
Pepper	...	...	...	...	...	12
Vinegar	...	...	...	...	...	9
Olive Oil	..	...	..	...	...	10
Lard	...	...	...	...	...	17
Ground Ginger	...	...	...	...	...	8
Cream of Tartar	...	...	...	...	...	9
Sago	...	...	...	...	...	3
Demerara Sugar	...	...	..	...	...	17
Sweets	..	...	...	...	...	10
						<hr/>
						Total 330

Of these samples nine were found adulterated. Proceedings were taken and penalties obtained.

Details of the results of analysis and prosecutions are given in Appendix C of this Report.

A conviction was obtained against a person for adulteration—the case having been referred back to the Justice on an appeal made by the Corporation to the High Court. Fined £1 8s. 6d., including costs.

INADEQUATE FINES IN CONNECTION WITH PROSECUTIONS UNDER FOOD AND DRUGS ACTS.

At a meeting of the Health Committee held on the 31st August 1904, it was reported that a person was summoned for adulteration of milk and fined 5/- and 6/6 costs.

This paragraph was referred back to the Health Committee by the Council on the 21st September. The Health Committee, after again considering the matter, passed a resolution "That the smallness of the fines imposed by the Borough Magistrates upon conviction under the sale of Food and Drugs Acts renders useless much of the work of the Health Committee", and that a copy of such resolution should be forwarded to each of the Borough Justices, together with a copy of a letter from the Home Office to Local Authorities drawing attention to the fact that the inadequate penalties imposed greatly impeded the efforts made to suppress the abuses under the Acts.

As an instance of the futility of imposing small fines in preventing the adulteration of milk, the following history of samples taken from one milk vendor in Southampton is interesting :--

Date of taking sample.	Result of Analysis.	Action taken.
Nov. 26, 1898.	Poor quality.	
April 24, 1899.	16 parts out of every 100 parts of cream abstracted.	Summoned : Find 10/- and 6/6 costs.
Jan. 12, 1900.	Exceptionally good quality.	
Oct. 7, 1900.	Exceptionally rich in cream.	
Jan. 30, 1901.	Considerably below average.	
April, 23, 1901.	16 parts of added water in every 100 parts.	Summoned : Find 10/- and 13 6 costs.
Oct. 31, 1901.	Slightly below average.	
Jan. 23, 1902.	Slightly below average.	
June 25, 1902.	15.53 parts of added water in every 100 parts.	Summoned ; case dismissed owing to discrepancy between date on label of bottle and Analyst's certificate.
June 10, 1903.	Deficient in fat at least 3%, and added water 5.2%. The sample also contained boracic acid.	Summoned.

When the last case came up for hearing on July 20th, 1903, the defendant produced a warranty that he had received the milk in the condition he sold it. He, however, admitted in the witness box that when he received the milk he put an ounce of boracic acid to each 10 gallons of milk into the churn as a preservative. The Magistrates were equally divided in opinion and dismissed the case.

The Corporation appealed from this decision to the High Court and the case was heard on February 6th, 1904, before the Lord Chief Justice, Mr. Justice Wills and Mr. Justice Kennedy, who were of opinion that there was a case for investigation as to the circumstances under which the boracic acid was added to the milk, and as to how it came to be adulterated with water. The milk was not shown to have been sold in the same state in which it was purchased, and that being so the Magistrates ought not to have held the warranty was a defence, but ought to have heard the case on its merits. The appeal was accordingly allowed and the case remitted to the Magistrates.

On the case coming before the Magistrates for rehearing on March 10th, 1904, the Analyst's certificate was disputed and on the application of defendant's solicitor, the sample—although nine months had elapsed since it was taken,—was forwarded to Somerset House for further analysis and the case again adjourned.

The adjourned case was heard on March 26th, 1904, when a letter was read from the Somerset House Authorities, who stated that it was impossible to make correct analysis owing to decomposition of the milk. The magistrates then fined defendant 20/- and 28/- costs.

Thus after all the litigation, expense and trouble, and notwithstanding the fact that defendant had been prosecuted four times in five years for selling adulterated milk or milk from which cream had been abstracted, the Magistrates only inflicted a nominal fine of £1.

UNSOUND FOOD.

The following articles of unsound food were condemned and destroyed under Magistrates' order during the year:—

Fish (comprising haddock, bloaters, kippers and herrings)	...	4,546 lbs.
Fruit	...	40 lbs.
Potatoes	...	1,344 lbs.

A quantity of bacon (132,300 lbs.) being a nuisance, was dealt with by notice. The whole was removed and destroyed.

Five hundred and twenty-three barrels and 60 crates containing pineapples in an unwholesome condition at the Docks were discovered causing a nuisance. A notice was served and the whole of the pineapples were destroyed.

CASES BEFORE THE JUSTICES OTHER THAN FOOD AND DRUG CASES DURING THE YEAR.

Situation of Premises.	Particulars.	How dealt with.
Maybush Farm, Maybush	Polluted well	Order made to close well, costs imposed, 6/-
2, Castle Lane	House unfit for human habitation	Closing order made, costs imposed, 6/-
5, Oriental St. Shirley	ditto	ditto
36, Lime Street	ditto	ditto
38, King Street	ditto	ditto
39, ditto	ditto	ditto
34, Lime Street	ditto	ditto
7, Richmond Street	Non-compliance with notice to abate nuisance	Order made for abatement of nuisance, costs imposed, 6/-
7, Church Terr. Millbrook	House unfit for human habitation	Closing order made, costs imposed, 3/-
8, ditto	ditto	ditto
1, 7, 9, 11, and 14, Guildford Street	Non-compliance with notice to abate nuisance	Order made for abatement of nuisance, fined £1 10
38, Craven Street	House unfit for human habitation	Case dismissed
10, Brewhouse Lane	ditto	Closing order made, costs imposed, 8/-
3, Lime Street	ditto	Closing order made, costs imposed, 6/-
3, ditto	For non-compliance with Justice's order for quitting premises unfit for human habitation	Premises vacated, costs imposed, 3/-
1, Avenue Cottages Shirley Warren	Non-compliance with notice to abate nuisance	Order made to abate nuisance
74, Grove Street	ditto	ditto
21, King Street	House unfit for human habitation	Closing order made, costs imposed, 6/-
1, Clifton Terrace	Overcrowding of a work-room	Fined 20/- and 6/6 costs
7, Canal Walk	Infringement of Shop Seats Act	Case dismissed
ditto	Infringement of Shop Hours Act	Fined 5/- and 6/6 costs
2, Wickham Court	House unfit for human habitation	Case before the Justices, Oct. 21st, Nov. 4th, and Nov. 21st. Case adjourned <i>sine die</i>
3, ditto	ditto	ditto

DRAINAGE UNDER THE NEW BUILDING BYE-LAWS.

During the year ending 31st December 1904, 319 building plans were submitted, of which 291 were approved and 28 rejected.

The approved plans comprise:—

Dwelling houses	...	...	...	...	315
Stables	...	...	...	...	10
Alterations and additions	...	...	...	...	99
Shop Fronts	...	...	...	...	40
Sewers, &c.	...	...	...	...	3
Other premises	...	...	...	...	60
Houses completed and certificates granted				...	251
Stables	...	...	...	...	8
Alterations and additions	...	...	...	...	45
Other premises	...	...	...	...	17
Number of Inspections during progress of work			...	...	3618
Drains tested and re-tested	...	...	...	...	411

The proposed amendments to the building bye-laws, so far as they relate to drainage and sanitary fittings of houses, mentioned in my last annual report, are still under the consideration of the Local Government Board.

The draft copy of the amended bye-laws was returned during the year for the consideration of the Council, containing objections made by the Local Government Board to some of the proposed amendments also for further information as to the necessity for the suggested alterations.

Objections were raised to the following alterations:—

Bye-Law (80).

To the limitation of the means of jointing iron drain pipes with molten lead, properly caulked, as it would prevent the use of other equally suitable joints.

The provision of means of access by manholes to each end of the portion of drain passing under a building, as being in some cases unnecessary.

Information was also required as to the term "ballast" in the making of concrete, and the need for specifying the weights of iron drains, and the amendment dealing with the connection of waste pipes to stoneware sinks.

Bye-Law (81)

The Local Government Board raise no objection to the necessity of the provision of suitable means of access by manholes at the disconnecting trap, but object to their being required to be made water-tight.

It is difficult to understand what reason the Board can have to the bye-law that all manholes should be made water-tight up to the ground level. The manhole is portion of the drain, and therefore liable, should the intercepting trap become choked, to be flooded with sewage, and if not water-tight to pollute the surrounding soil. If the manhole is not made water-tight it is of course not air-tight, and if in close proximity to the dwelling house, there is the danger of polluting the surrounding air.

The term "ballast" is locally understood to mean gravel. The words "where practicable" as proposed in our amendments, should cover the Local Government Board's objection.

The words "heavy cast iron" are too vague, and may mean ordinary heavy soil pipes.

The object of our amendment with regard to the connections of waste pipes with stoneware sinks is the unsatisfactory manner in which connections are in some cases made, the jointing principally being made by tafting the lead pipe or trap in the sink with a putty seating, causing a leakage on to the floor if the trap or pipe should be accidentally knocked.

There are many improvements that may be effected to obtain a better standard of work in drainage and sanitary fittings.

The present system of discharging lavatory and bath waste pipes into open hopper heads near to windows is most undesirable. There should also be no connection from such fittings with the rain-water stack-pipes.

The waste pipes from lavatory and bath should be connected with a main stack outside the building and made to discharge at the foot into a gully trap below the grating but above the water seal.

of such trap, and the top of stack-pipe carried up full bore to a safe height above all windows.

The waste pipe from a lavatory basin should be $1\frac{1}{4}$ inch internal diameter, and the bath waste $1\frac{1}{2}$ inch, both fittings to be trapped by means of a trap of equal size to the pipes.

Where two or more waste pipes discharge into one stack pipe, provision should be made to prevent syphonage of the traps.

Waste pipes from scullery sinks should be trapped by means of a trap not less than 2 ins., diameter and made to discharge into a gully trap, below the grating, but above water seal of such trap.

At every change of direction of a drain, means of access by properly constructed manholes would be of considerable advantage in facilitating cleansing and inspection.



APPENDIX A.

FACTORY AND WORKSHOP ACT, 1901.

3rd Annual Report.

In accordance with the requirements of the Factory and Workshop Act, I have the honour to submit the following report on its administration in the Borough during the year ending 31st December, 1904.

There are 727 factories, workshops, bakehouses, and laundries on the register. They give employment to 4,413 workers, 3,832 males and 1,581 females, as compared with a total of 4,206 in 1903.

Table A. Factories:

	No. on Register.	No. of Employés.		Total.	No. of Visits.
		Male.	Female.		
Antiseptic Factories	1	3	...	3	1
Bedding	2	22	15	37	2
Boot	6	22	5	27	9
Brass and Iron Founders	2	20	...	20	2
Brush and Basket Makers	1	40	18	58	1
Builders and Contractors	13	278	...	278	16
Cabinet Makers	3	13	...	13	3
Cement, Lime, and Putty Works	4	72	...	72	5
Cycle Makers	6	39	...	39	8
Dyeing and Cleaning Works	1	20	20	40	2
Enamelled Slate Works	1	6	5	11	1
Engineers	2	8	...	8	2
Margarine Factories	1	53	...	53	1
Mineral Water Factories	8	61	23	84	13
Oil Coke	1	60	...	60	1
Picture Frame	1	2	...	2	1
Sailmakers	1	3	...	3	1
Sausage Making Factories	12	24	...	24	26
Ship and Yacht Builders	5	624	...	624	5
Seedsmen	1	13	26	39	1
Stonemasons	1	25	...	25	2
Ticket Writers	1	5	...	5	1
Wholesale Druggists	2	8	...	8	3
Wine and Beer Bottlers	4	21	...	21	6
Totals		80	1442	112	1554
					113

NUISANCES ABATED IN FACTORIES DURING YEAR.

Drains relaid	...	...	...	...	...	1
New water closets erected	...	...	...	...	...	3
New urinals erected	...	...	...	...	...	1
New waste pipe fitted to urinal	...	...	...	...	...	1
Defective eaves guttering repaired	...	...	...	...	...	1
Floor of factory repaired	...	...	...	...	...	1
Yard paving repaired	...	...	...	...	...	1

Table B. Workshops.

	No. on Register.	No. of Employes.		Total.	No. of Visits.
		Male.	Female.		
Billiard Table Makers	1	3	...	3	1
Blacksmiths and Coachbuilders...	34	151	...	151	60
Blind Makers	2	10	...	10	3
Block and Spar Makers	1	2	...	2	1
Boot Makers	37	97	...	97	77
Brass and Iron Founders	1	4	...	4	2
Brush and Basket Makers	5	10	3	13	9
Cabinet Makers and Upholsterers	17	85	...	85	37
Carpenters and Builders	32	127	...	127	44
Carpet Making and Upholstery					
Needlework	5	6	25	31	7
Clay Tobacco Pipe Makers	1	5	1	6	2
Clothes Cleaners	1	2	2	4	1
Confectioners and Sugar Boilers	2	5	...	5	7
Cork Makers	1	1	...	1	1
Corsetières	1	...	3	3	3
Coopers	1	2	...	2	4
Cycle Makers and Repairers	12	39	...	39	20
Dress and Mantle Makers	102	...	802	802	279
Electricians	3	12	...	12	5
Engineers and Fitters	2	8	...	8	5
Feather Dressers and Furriers	4	...	7	7	6
Flag and Banner Makers	1	...	11	11	2
Gut Scraper, Tallow Melter, and					
Tripe Dressers	3	11	...	11	18
Mineral Water Makers	1	2	...	2	2
Organ Builders	1	4	...	4	1
Painters and Decorators	8	24	...	24	11
Perfumers	1	7	12	19	1
Photographers	9	16	27	43	13
Picture Framers	5	16	...	16	11
Plumbers and Gasfitters	5	14	...	14	6
Rag Pickers	3	5	12	17	17
Restaurant Kitchens	21	63	22	85	52
Sadlers and Harness Makers	9	25	...	25	18
Sailmakers	1	15	...	15	3
Stonemasons	5	24	...	24	8
Tailors	97	165	216	381	343
Tea and Flour Packers	2	9	1	10	2
Ticket Writers and Engravers	4	12	...	12	8
Tin Plate Workers	10	40	...	40	22
Trunk and Bag Makers	2	6	...	6	3
Umbrella Makers	1	1	2	3	1
Undertakers	6	12	...	12	9
Watchmakers, Opticians, &c.	13	29	...	29	19
Weight and Scale Makers	2	10	...	10	4
Wholesale Chemists	1	4	5	9	2
Wine and Beer Bottlers	5	22	...	22	6
Yacht and Boat Builders	3	24	...	24	8
 Totals	484	1129	1151	2280	1164

Seventy-one workshops have been added to the Register during the year, and 34 have lapsed, leaving a total of 484 in actual use.

NUISANCES ABATED IN WORKSHOPS DURING THE YEAR.

Drains relaid, trapped and ventilated	...	...	...	5
Drains intercepted from sewer	...	...	...	4
New inspection chambers constructed	...	...	...	4
Drains cleared and repaired	..	...	...	3
New mica valves fixed	...	...	...	2
Extra water closets provided to workshops	...	...	...	3
Water closets reconstructed	...	..	...	12
Watercloset, new pans fitted	...	...	...	8
,, lighted and ventilated	...	...	...	3
,, new impervious floors laid	...	...	...	3
,, new cisterns, flush pipes, &c	...	...	...	6
,, new soil-pipe erected	...	...	...	1
Roof of workshops repaired	...	..	...	1
Eaves guttering and stack-pipes fixed or repaired	...	...	...	6
New sinks and sink wastes fixed	...	...	...	9
New impervious floor laid to workshops	...	...	...	1
Yards paved, and paving repaired	...	...	...	12
Impervious receptacles provided (offensive trade)	...	...	...	1
Smoke nuisance abated	...	...	...	2
Overcrowding of workrooms abated	...	...	...	5
Workrooms cleansed and limewashed	...	...	...	40
Accumulations of manure refuse, &c., removed	...	...	...	3
				134
Number of workrooms measured during the year	...	...		75

**Infectious Disease occurring on Workshop Premises
during year 1904.**

Date.	Disease.	Address.	Trade.	Action Taken.
Jan 29	Diphtheria	Four Post Hill	Tailor	The child was removed to Isolation Hospital and premises and bedding (including tailoring work in house at time) disinfected. The drains were found defective and re-laid after notice.

**Infectious Disease occurring in homes of persons
employed in Workshops during the Year.**

Two cases of scarlet fever and eight cases of diphtheria occurred in homes of persons employed in factories and workshops during the year.

All the cases were removed to the Isolation Hospital and the premises, bedding, &c., disinfected. In each case, also, the workers received instructions to remain away from workplaces until all possible danger of infection had ceased.

Reports received from H.M. Factory Inspector.

Twenty-four reports have been received from the Factory Inspector during the year, viz:—

Nature of Report.	No. sent in.	Action Taken.
New workrooms or change of address	20	Premises inspected, rooms measured, &c.
Sanitary defects	2	Defects remedied.
Overcrowded Workrooms	2	(1). No overcrowding found on inspection. (2). Overcrowding found and occupier of workroom prosecuted.

Notifications sent to the Factory Inspector.

Forty-five notifications have been forwarded to the Factory Inspector during the year respecting new workshops, change of address or breaches of the Factory and Workshop Act.

Legal Proceedings.

During October a tailor was prosecuted for overcrowding his workroom and fined 20/- and 6/6 costs.

Home Work.

During February 40 lists were sent in containing 176 outworkers, and during August 38 lists, containing 172 outworkers.

They are situated as follow :—

Town District ...	...	...	...	124
Northam and Chapel	...	...	...	16
Bevois Town and Portswood	...	...	...	16
Freemantle and Shirley	...	...	...	14
Outside District	...	...	...	6
				—
				176
				—

Forty-eight of these premises are registered as workshops, employing labour, and of the 122 remaining in our district, 111 are used for tailoring work, 10 for upholstery and fancy needlework, and one 1 for boot-making, employing 53 males and 69 females.

The names and addresses of the outworkers living outside the Borough have, in accordance with Section 107 of the Factory and Workshop Act, been forwarded to the Authorities of the District in which they reside.

Two hundred and forty-two visits of inspection have been made during the year to outworkers' residences, resulting in 8 nuisances being detected and abated. The nuisances were as follow :—

Defective roof	...	...	...	1
„ water closet	...	...	...	1
„ yard paving	..	...	...	2
„ stackpipe, &c.,	...	...	...	1
„ sink and waste-pipe	...	...	...	1
Dirty workrooms	...	...	...	2
				—
				8
				—

BAKEHOUSES.

There are 130 bakehouses on the Register, five being factories (i.e. using mechanical power) and 125 workshops. They give employment to 225 males and 2 females.

Five hundred and sixty-nine visits of inspection have been made during the year, and 39 nuisances abated (see table).

All bakehouses were relimewashed during the months of April and October, in accordance with the Regulations. New bakehouses have been erected at :—

- (1). 157, Above Bar Street.
- (2). 45, Onslow Road.
- (3). 18, Palmerston Road.

and two others have been closed, viz :—

- (1). 75, Orchard Lane.

(2). 46, Church Street, Shirley. This bakehouse was closed by the owners in preference to carrying out necessary extensive repairs.

Table C. Bakehouses.

	No. on Register.	No. of employés.		Total.	No. of Visits.
		Male.	Female.		
Factories ...	5	25	—	25	15
Workshops...	125	200	2	202	554
	130	225	2	227	569

NUISANCES ABATED DURING THE YEAR.

Drains relaid, trapped and ventilated	...	...	...	1
Drains intercepted from sewer	...	...	...	1
New inspection chambers constructed	...	...	...	1
Water closets reconstructed	...	...	...	2
Water closet accommodation provided to bakehouses	...	...	...	1

New impervious floors laid to water closets ..	...	...	2
Roof of bakehouses repaired ...	...	...	2
Floors of bakehouses relaid or repaired ...	...	...	4
Bakehouses lighted and ventilated...	...	...	2
Bakehouses cleansed and limewashed ...	...	..	4
Bakehouses closed as unfit for use ...	...	...	2
Eaves guttering and stackpipes repaired ...	...	...	2
Yards paved and paving repaired ...	...	...	2
Smoke nuisance abated ...	...	...	1
Stable paved and drained ...	...	...	1
,, lighted and ventilated ...	...	...	1
New manure vaults constructed ...	...	...	3
Accumulations of manure, &c., removed ...	...	...	5
Other Nuisances ...	...	...	2
			39
			—

Laundries.

There are 33 laundries on the Register, 9 of which use mechanical power, and 24 manual labour ; they employ 36 male and 316 females.

Eighty-five visits of inspection have been made during the year, and eight nuisances abated.

Table D. Laundries.

	No. on Register.	No. of Employees.		Total.	No. of Visits.
		Male.	Female.		
Factories	9	26	232	18
Workshops...	...	24	10	120	67
Totals	33	36	352	85

Nuisances abated in Laundries during the year.

Floor of wash-house relaid	...	...	...	...	1
Workrooms relimewashed	...	...	...	...	6
Accumulations of manure removed	...	...	...	...	1
					— 8

Visits *re* Sanitary Matters.

In addition to the foregoing 1,074, Visits have been made during the year, comprising re-visits to Factories, Workshops, Bakehouses and Laundries, serving notices, investigating complaints of nuisances and overcrowding and various other matters.

SHOP HOURS AND SHOP SEATS ACT.

The Register contains entries of 227 premises in occupation, six have lapsed during the year, viz., 2 bootmakers, 3 grocers, and 1 hardware dealer, and 50 other premises have been added.

Trades Classified.

Art dealer	...	...	...	...	1
Bootmakers	...	...	...	...	22
Butchers	...	...	...	...	13
Cycle dealers	...	...	...	...	1
Confectioners	...	...	...	...	29
Drapers	...	...	...	...	38
Engravers	...	...	...	...	1
Grocers	...	...	...	...	70
Hardware dealers...	...	...	...	...	5
Hotels and Public Houses	...	...	...	...	23
House furnishers ...	...	...	...	...	3
Opticians	...	...	...	...	1
Picture Framers ...	...	...	...	...	1
Refreshment Houses	...	...	...	...	9
Tobacconists	...	...	...	...	3
Toy and Fancy Repositories ...	...	...	...	...	6
Wool Stores	...	...	...	...	1

In the 227 trades classified above there are 513 females employed who come under the requirements of the Shop Seats Act, and 247 "young persons" under the Shop Hours Act, 170 being male and 77 female.

Two hundred and thirteen visits have been made during the year, viz:—

Shop Seats Act	...	...	...	96
Shop Hours Act	...	...	...	117
				213

Section 4, Shop Hours Act, requires a notice to be exhibited. This requirement has been complied with in 42 instances after verbal notice, and in one instance after prosecution.

Three seats have been provided after verbal notice, in compliance with Section 1, Shops Seats Act, and one seat provided after prosecution.

Legal Proceedings.

During October, W.C., Canal Walk (a confectioner) was prosecuted for:—

Non-compliance with Section 1, Shop Seats Act.	
ditto.	ditto. 4, Shop Hours Act.

The cases were heard on November 4th, and in the former the case was dismissed; in the latter, defendant was fined 5/- and costs.

This Table is inserted by request of the Secretary of State.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances,

Premises,	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	131	3	...
Workshops (Including workshop Laundries)	1,179	29	1
Workplaces	52	8	...
Homeworkers' Premises	242	4	...
Total	1,604	44	1

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :				
Want of cleanliness	50	50	...	...
Want of Ventilation	2	2	...	...
Overcrowding	5	5	...	1
Want of drainage of floors	1	1	...	...
Other nuisances	101	101	...	...
Sanitary accommodations—				
insufficient	2			
unsuitable or defective	23	26	26	...
not separate for sexes... ...	1			...
Offences under the Factory and Workshop Act :				
Illegal occupation of underground bakehouse (S. 101) ... ..	...	...	...	...
Breach of special sanitary requirements for bakehouses (Ss. 97 to 100) ...	2	2	...	...
Failure as regard lists of outworkers (S. 107)	3	3	...	...
Giving out work to be done in premises which are :				
unwholesome (S. 108) ... ..	...	...	...	...
infected (S. 110) ... ..	...	...	...	...
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (S. 109) ... ..	...	...	...	...
Other offences ... .. ..	...	...	...	...
Total	190	190	...	1

3.—OTHER MATTERS.

CLASS.	Number.		
Matters notified to H.M. Inspectors of Factories :—			
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	33		
Action taken in matter referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5) :—			
Notified by H.M. Inspector	4		
Reports of action taken	24		
Other	20		
Underground Bakehouses (S. 101) :—			
In use during 1903	11		
Certificates granted { in 1903 ...	...	
in 1904 ...	8		
In use at the end of 1904	8		
Homework :—	Number of		
Lists of Overworkers (S. 107) :—			
Lists received	78		
Addresses of out- workers { forwarded to other Authorities ...	348		
{ received from other Authorities ...	13		
nil			
Homework in unwholesome or infected premises :—			
Notices prohibiting homework in unwholesome premises (S. 108) ... ... ...	...	
Cases of infectious disease notified in homeworkers' premises	1		
Orders prohibiting homework in infected premises (S. 110) ... ... ...	...	
Workshops on the Register (S. 131) at the end of 1904 :—			
Workshop Bakehouses	125		
" Laundries	24		
Other Workshops	484		
Total number of Workshops on Register ...	633		

APPENDIX B.—CONTENTS.

SYNOPSIS OF TABLES.

Table 1.—Showing births and birth rates for the whole Borough and various districts for ten years, 1895-1904.

,, 2.—Showing deaths and death rates for the whole Borough and various districts for ten years, 1895-1904.

,, 3.—Death from all causes at subjoined ages in the Borough of Southampton, from 1895-1904.

,, 4.—Causes of deaths in Southampton for ten years, 1895-1904.

,, 5.—Showing population, birth rates, death rate, zymotic death rates, infantile mortality, and marriage rates in Southampton and England and Wales for twenty years, 1885-1904.

,, 6.—Table prepared, in accordance with Local Government Board's instructions. Showing population, births, and deaths for ten years.

,, 6A.—Ditto. Showing population, births, and deaths in the various districts of the Borough for ten years.

,, 6B.—Ditto. Showing cases of infectious diseases notified during 1904, Classified according to ages and localities, and the number removed to Hospital.

,, 6c.—Ditto. Showing deaths occurring in 1904, Classified according to diseases, ages, and localities.

,, 7.—Deaths from zymotic diseases for five years.

,, 8.—Comparative mortality of Southampton with other towns.

,, 9.—Showing causes of, and ages of all deaths registered in the Borough of Southampton during the year 1904.

,, 10.—Showing marriage rate, birth rate, death rate, zymotic death rate, and infantile mortality in the registration districts of the Borough for the year 1904.

,, 11.—Showing number and description of cases of infectious disease notified to the Medical Officer of Health in each of the four quarters of 1904.

,, 12.—Showing all diseases notified during the past ten years, and the number of them admitted to Hospital.

,, 13.—Vaccination returns for Town proper.

,, 14.—Abstract from the Meteorological Register kept at the Ordnance Survey Office, Southampton, during the year 1904, and average for 10 years.

APPENDIX B.

The Totals for 1904 include the 52 weeks ending 31st December, 1904.

NOTE.—The Totals in the following Tables (where not otherwise stated) include Deaths of Non-Residents, but the various Death Rates are calculated upon corrected Totals.

TABLE 1.

SHOWING BIRTHS AND BIRTH RATES FOR THE WHOLE BOROUGH AND VARIOUS DISTRICTS FOR 10 YEARS—1895—1904.

Year.	Whole Borough.				Town Proper.		Portswood.		Shirley and Freemantle.	
	Males	Females	Total Births	Birth Rate	Total Births	Birth Rate	Total Births	Birth Rate	Total Births	Birth Rate
1895	1085	1095	2180	30.38	1874	31.90	306	23.51	...	...
1896	1467	1392	2859	30.36	1912	32.13	368	25.82	579	28.38
1897	1458	1479	2937	30.43	1886	31.43	439	28.78	612	28.73
1898	1545	1400	2945	29.76	1847	30.55	479	29.94	619	28.51
1899	1534	1461	2995	29.55	1803	29.61	508	30.32	684	28.86
1900	1477	1452	2929	28.30	1751	28.58	484	27.65	694	28.04
1901	1597	1544	3141	29.77	1812	29.44	542	29.86	787	30.50
1902	1593	1559	3152	28.77	1764	28.09	564	29.22	824	30.05
1903	1638	1527	3165	28.84	1718	27.80	583	29.77	864	30.45
1904	1502	1501	3008	26.78	1677	27.01	525	25.39	801	27.01
Average 9 Years.	1534	1479	3014	29.17	1797	29.38	499	28.53	718	28.95

TABLE 2.

SHOWING DEATHS AND DEATH RATES FOR THE WHOLE BOROUGH AND VARIOUS DISTRICTS FOR 10 YEARS—1895—1904.

Year.	Whole Borough.				Town Proper.		Portswood.		Shirley and Freemantle	
	Males	Females	Total Deaths	Death Rate	Total Deaths	Death Rate	Total Deaths	Death Rate	Total Deaths	Death Rate
1895	716	679	1395	18.69	1240	20.18	155	11.92	...	...
1896	837	820	1657	17.15	1170	18.77	188	13.54	299	14.95
1897	864	847	1711	17.34	1209	19.73	191	12.98	311	15.11
1898	882	874	1756	17.25	1222	18.94	229	15.00	305	14.31
1899	1072	920	1992	19.08	1402	21.82	246	14.92	344	14.98
1900	990	891	1881	17.59	1325	20.36	218	12.97	338	13.99
1901	931	858	1789	16.48	1188	18.23	221	12.84	380	14.92
1902	910	816	1726	15.47	1137	17.24	229	12.53	360	13.64
1903	836	721	1556	13.87	996	15.45	200	10.36	361	12.83
1904	839	751	1590	13.83	992	15.07	238	11.84	379	12.65
Average 9 Years.	907	833	1740	16.45	1182	18.40	218	12.89	342	14.15

TABLE 3.

DEATHS FROM ALL CAUSES AT SUBJOINED AGES IN THE COUNTY BOROUGH OF
SOUTHAMPTON, FROM 1895 TO 1904.

Year.	At all Ages.	Under 1 Year.	1 and under 5	5 and under 15	15 and under 25	25 and under 60	60 and upwards.
1895	1395	339	149	43	59	377	428
1896	1657	420	218	72	73	453	421
1897	1711	457	211	60	54	421	508
1898	1756	452	171	85	65	497	486
1899	1992	534	211	77	66	533	571
1900	1881	448	182	64	65	543	579
1901	1789	484	124	56	73	511	541
1902	1726	390	171	65	71	508	521
1903	1557	363	139	64	64	423	504
1904	1590	349	136	51	79	510	465

TABLE 4.

CAUSES OF DEATHS REGISTERED IN SOUTHAMPTON FOR TEN YEARS, 1895 TO 1904
(EXCLUDING DEATHS OF NON-RESIDENTS.)

TABLE 5.

SHOWING POPULATION, BIRTH RATES, DEATH RATES, ZYMOTIC DEATH RATES, INFANTILE MORTALITY, AND MARRIAGE RATES IN SOUTHAMPTON AND ENGLAND AND WALES FOR TWENTY YEARS, 1885—1904.

Year.	Population	Births.		Deaths.		Zymotic Deaths.		Infantile Mortality Deaths under 1 year per 1000 Births Registered.		Marriages.			
		Total Births.	Birth Rate.	Birth Rate England and Wales.	Death Rate.	Death Rate England and Wales.	Total Zymotic Deaths.	Zymotic Death Rate.	Zymotic Death Rate England and Wales.	Southampton.	England and Wales.	Total Marriages.	Marriage Rate.
1885	62,160	1,914	30.8	32.5	1,190	18.9	146	2.34	2.19	146	138	—	—
1886	62,668	1,926	30.7	32.4	1,153	18.0	71	1.13	2.36	140	150	481	15.3
1887	63,215	1,979	31.3	31.4	1,214	18.7	135	2.13	2.29	145	145	520	16.4
1888	63,742	1,996	31.3	30.5	1,094	16.9	94	1.47	2.10	126	144	551	17.3
1889	64,270	1,966	30.6	30.6	1,081	16.3	85	1.32	1.77	117	144	514	16.0
1890	64,797	1,848	28.5	29.7	1,168	17.5	82	1.26	2.03	129	151	520	15.1
1891	65,325	2,045	31.3	31.4	1,191	18.0	47	0.72	1.83	123	149	583	17.8
1892	66,650	1,911	28.6	30.5	1,466	21.5	79	1.15	1.90	148	148	589	17.7
1893	68,200	2,015	29.5	30.8	1,370	19.5	157	2.32	2.52	157	159	648	19.0
1894	70,000	2,113	30.2	29.6	1,161	16.0	81	1.14	1.88	119	137	617	17.6
1895	71,750	2,180	30.4	30.3	1,395	18.7	187	1.53	2.21	155	161	675	18.8
1896	94,150	2,859	30.4	29.7	1,657	17.2	171	1.92	2.04	217	146	838	17.8
1897	96,500	2,937	30.4	29.7	1,711	17.3	174	2.17	2.24	215	156	848	17.6
1898	98,950	2,945	29.8	29.4	1,756	17.3	267	2.63	2.21	153	161	791	16.0
1899	101,350	2,995	29.6	29.3	1,992	19.1	183	2.88	2.19	178	163	896	17.7
1900	103,500	2,929	28.3	28.9	1,881	17.6	163	1.51	1.99	152	154	846	16.3
1901	105,500	3,141	29.4	28.5	1,789	16.5	173	1.64	2.05	154	151	918	17.4
1902	107,833	3,152	28.8	28.4	1,726	15.5	163	1.45	1.64	124	133	966	17.9
1903	110,120	3,165	28.8	28.4	1,557	13.9	144	1.31	1.46	114	132	883	16.1
1904	112,500	3,003	26.8	27.9	1,590	13.8	162	1.00	1.94	114	146	859	15.3
Average 20 years		2,451	29.8	30.0	1,458	17.4	18.0	141	1.66	140	149	713	17.5

NOTE.—The Zymotic Deaths and Death Rates include only the seven principal Zymotic Diseases, viz.:—Whooping Cough, Measles, Diarrhoea, Diphtheria, Scarlet Fever, Typhoid Fever and Small Pox.

TABLE 6.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1904 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each year.	Births.		TOTAL DEATHS REGISTERED IN DISTRICT				NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT.			
		Under 1 year of age		At all ages		TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.		Deaths of Residents registered in Public Institutions beyond the District.			
		Number.	Rate.*	Number.	Rate per 1,000 Births registered	Number.	Rate.*	Number.	Rate.*	Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	13
1894	70,000	2,113	30.2	253	119	1,161	16.6	175	42	..	1.119
1895	71,750	2,180	30.4	339	155	1,395	19.4	220	54	..	1.341
1896	94,150	2,859	30.4	420	146	1,657	17.6	203	42	..	1.615
1897	96,500	2,987	30.4	457	156	1,711	17.3	194	37	..	1.674
1898	98,950	2,945	29.8	452	153	1,756	17.7	248	49	..	1.707
1899	101,350	2,995	29.6	534	178	1,992	19.6	253	58	..	1.934
1900	103,500	2,929	28.3	448	152	1,881	18.2	286	61	..	1.820
1901	105,500	3,141	29.8	484	154	1,789	17.0	271	50	..	1.739
1902	107,833	3,152	28.8	390	124	1,726	15.8	338	56	..	1.695
1903	110,120	3,165	28.8	363	114	1,657	14.2	289	45	10	1.522
Averages for years 1896-1903	102,238	3,015	29.5	444	145	1,759	17.2	261	50	..	1.713
1904	112,500	3,003	26.8	349	114	1,590	14.2	298	65	26	1.551
											13.8

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

NOTE.—The Deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the District. The Deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

TABLE 6 A.

VITAL STATISTICS OF SEPARATE LOCALITIES IN 1904 AND PREVIOUS YEARS.

YEAR.	WHOLE DISTRICT.		TOWN.		PORTSWOOD.		SHIRLEY.	
	Population of each middle year.	Deaths at all Ages.	Births registered.	Deaths at all Ages.	Births registered.	Deaths at all Ages.	Births registered.	Deaths at all Ages.
1894	70,000	2,113	1,119	253	58,000	1,797	978	..
1895	71,750	2,180	1,341	339	58,750	1,874	1,186	..
1896	94,150	2,859	1,615	420	59,500	1,912	1,117	283
1897	96,500	2,937	1,674	457	60,000	1,886	1,153	313
1898	98,950	2,945	1,707	452	60,450	1,847	1,145	285
1899	101,350	2,995	1,934	534	60,900	1,803	1,329	338
1900	103,500	2,929	1,891	448	61,250	1,751	1,247	305
1901	105,500	3,141	1,739	484	61,550	1,812	1,121	287
1902	107,833	3,152	1,695	390	61,833	1,764	1,088	236
1903	110,120	3,165	1,522	361	62,000	1,718	997	215
Averages of Years 1896-1903	102,238	3,015	1,713	443	60,935	1,812	1,149	283
1904	112,500	3,003	1,551	344	62,000	1,677	931	204

This Table includes Deaths of Residents occurring in Public Institutions outside the Borough, and excludes the Deaths of Non-Residents occurring within the Borough.

TABLE 6 B.
CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.					TOTAL CASES NOTIFIED IN EACH LOCALITY.			No. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.										
	At all ages.	Under 1.	1 to 5	5 to 15	15 to 25	25 to 65.	65 and upwards	Portsmouth.	Trowm.	Shirley.	Portsmouth.	Trowm.	Shirley.	Portsmouth.	Trowm.	Shirley.	Portsmouth.	Trowm.	Shirley.
Small Pox...	1	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...
Cholera...	158	...	31	108	12	7	...	53	49	56	42	29	45	...	...	...	...	...	...
Diphtheria...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Membranous Croup	49	1	...	2	4	35	9	32	5	12	...	...	...	...	...	...	...	...	...
Erysipelas...	113	2	31	67	7	6	...	61	18	34	57	13	32	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	19	...	1	12	5	1	...	13	5	1	6	...	...	...	...	...	...	...	1
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	3	...	...	...	...	1	2	...	2	1	...	...	...	...	...	...	...	...	...
Plague...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	343	3	63	190	29	49	9	162	78	103	106	42	78	...	...	...	...	...	...

TABLE 6 C.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1904.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.						Deaths in or belonging to Localities at all ages.	Town.	Portsmouth.	Shirley.	TOTAL DEATHS IN PUBLIC INSTITUTIONS.
	All Ages.		Under 1		1 and under 5.						
	5 and under 15	15 and under 25.	25 and under 65.	65 and upwards.							
Small-pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	1	9	7	...	...	...	...	...	10	4	1
Whooping-cough	16	9	7	...	...	...	...	...	...	2	..
Diphtheria and Membranous											
Croup	12	...	9	3	...	...	...	5	3	4	7
Croup	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus	1	...	...	...	...	1	...	...	1	...	3
Fever { Enteric	...	...	...	...	...	...	...	...	...	...	...
Other continued	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza	7	1	...	...	...	3	3	5	...	2	...
Cholera	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea	82	54	19	1	...	3	5	49	11	22	10
Enteritis	11	6	2	...	1	1	1	5	1	5	2
Puerperal Fever	3	...	...	1	1	2	...	2	1	...	...
Erysipelas	3	...	...	...	...	2	...	3	...	...	1
Other septic diseases	6	2	...	...	1	1	2	3	...	3	1
Tuberculosis (Pulmonary Tuber-											
culosis	137	...	...	4	21	106	6	92	19	26	37
Other tubercular diseases	64	19	26	8	6	4	1	50	2	12	14
Cancer, malignant disease	106	...	...	...	...	57	49	48	26	32	24
Bronchitis	157	22	15	2	2	30	86	103	26	28	21
Pneumonia	90	16	28	6	1	17	22	50	23	17	13
Pleurisy	5	...	...	...	2	1	2	3	...	2	1
Other diseases of Respiratory											
organs	15	2	2	1	...	5	5	11	1	3	4
Alcoholism	6	...	...	...	...	6	...	3	1	2	3
Cirrhosis of Liver	21	...	...	...	...	18	3	15	3	3	5
Venereal diseases	6	1	...	...	1	3	1	3	...	3	3
Premature birth	82	82	...	...	...	...	...	50	10	22	3
Diseases and accidents of par-											
urition	4	...	...	1	3	...	3	1	...	...	...
Heart diseases	127	...	1	4	8	55	59	72	23	32	13
Accidents	30	5	4	3	2	13	3	18	6	6	14
Suicides	9	...	...	...	...	7	2	4	2	3	...
All other causes	550	125	20	16	18	148	223	324	81	145	118
All causes	1551	344	134	49	66	485	473	931	245	375	298

TABLE 7.

The total Deaths from the seven principal Zymotic Diseases amounted to 112,
14 being of a notifiable and 98 being of a non-notifiable character.

		1900	1901	1902	1903	1904	
Small Pox	...	...	...	1	...	...
Scarlet Fever	...	...	2	...	5	8	1
Diphtheria	...	...	24	9	24	27	12
Enteric Fever	...	...	13	7	15	19	1
Measles	...	...	51	6	50	1	...
Whooping Cough	...	19	20	43	29	16	
Diarrhoea	...	48	131	22	60	82	
Totals	...	...	157	174	159	144	112

Notification under
the Infectious Disease (Notification
Act, 1889).
Death Rate 0·12.

Not Notifiable
under the said Act.
Death Rate 0·86.

TABLE 8.

VITAL STATISTICS OF SOUTHAMPTON COMPARED WITH OTHER TOWNS.

TOWN.	Population. Registrar General's Estimate, 1904.	Birth Rate.	Recorded Death Rate.	Deaths under 1 year per 1000 births.
London ..	4,648,950	28.0	16.1	144
Croydon ..	144,419	26.1	13.8	129
West Ham ..	288,424	32.2	16.8	165
East Ham ..	116,902	31.7	13.5	140
Hastings ..	66,503	17.6	13.1	107
Brighton ..	126,286	23.5	16.5	133
Portsmouth ..	198,038	29.3	16.9	142
Southampton ..	112,500	26.8	13.8	115
Bournemouth ..	64,645	17.2	13.6	111
Plymouth ..	114,003	25.3	18.7	173
Bristol ..	343,204	26.1	15.4	134
Reading ..	76,373	25.9	13.9	133
Great Yarmouth ..	52,099	27.9	17.0	165
Hanley ..	63,932	33.8	21.2	206
Burton-on-Trent ..	51,934	26.1	15.1	118
Wolverhampton ..	98,194	29.8	14.6	152
West Bromwich ..	67,186	33.5	15.9	149
Birmingham ..	537,965	31.5	19.3	195
Coventry ..	73,904	31.4	15.5	137
Leicester ..	224,186	26.7	14.6	163
Nottingham ..	248,811	27.8	17.5	175
Derby ..	120,449	27.3	15.2	143
Stockport ..	97,008	26.6	20.0	201
Birkenhead ..	114,824	33.1	19.9	..
Liverpool ..	723,430	33.5	21.9	196
Bootle ..	61,755	30.9	18.6	180
St. Helens ..	88,545	37.3	20.4	174
Wigan ..	62,800	34.6	19.5	188
Warrington ..	67,331	32.7	19.5	171
Bolton ..	175,744	26.9	16.9	167
Bury ..	58,450	23.7	17.1	163
Salford ..	228,983	31.7	21.0	193
Oldham ..	139,497	24.9	18.3	155
Rochdale ..	85,601	22.8	16.1	152
Burnley ..	100,569	27.3	20.9	233
Blackburn ..	132,134	23.5	17.2	192
Preston ..	115,055	28.3	17.8	183
Barrow-in-Furness ..	59,654	28.0	12.0	122
Huddersfield ..	94,925	23.7	17.5	136
Halifax ..	107,580	20.1	15.5	130
Bradford ..	285,089	22.0	17.5	167
Leeds ..	450,142	28.0	17.9	176
Sheffield ..	432,940	32.0	16.8	159
York ..	81,268	28.2	16.2	170
Hull ..	253,865	30.8	18.0	181
Middlesborough ..	96,684	37.1	19.9	170
West Hartlepool ..	69,251	33.0	16.3	134
Sunderland ..	151,157	34.4	19.4	165
South Shields ..	107,334	34.5	18.1	144
Tynemouth ..	53,060	34.9	19.4	152
Newport (Mon.) ..	71,543	32.7	15.7	150
Cardiff ..	176,313	29.5	15.2	144
Rhondda ..	122,310	39.7	19.1	190
Merthyr Tydfil ..	72,745	38.5	19.7	186
Swansea ..	95,931	30.5	17.7	172

TABLE 9.

TABLE SHOWING ALL DEATHS REGISTERED IN THE COUNTY BOROUGH OF SOUTHAMPTON DURING THE YEAR ENDING 31ST DECEMBER, 1904, CLASSIFIED ACCORDING TO DISEASES AND AGES,

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.										SEX.		Totals.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	Males	Females	
Tuberculous Disease of Knee	..	1	..	..	..	..	..	..	..	..	..	..	1
Hip Joint Disease	1
Acute Alcoholism	1
Chronic Alcoholism	6
Eating Poisonous Berries	1
Rheumatism	3
Rheumatoïd Arthritis	1
Gout, and Rheumatic Gout	3
Cancer	111
Diabetes Mellitus	9
Anæmia	7
Leucocythaemia	1
Hæmophilia	1
Premature Birth	1
Injury at Birth	1
Malformation of Heart	1
Spina Bifida	3
Imperforate Anus	1
Cleft Palate	1
Other Malformations	1
Icterus Neonatorum	3
Hæmorrhage from Umbilicus	1
Want of Breast Milk	1
Atrophy, Debility, Marasmus	25
Dentition	10
											34	25	59
											9	9	19

TABLE IX.—CONTINUED.

DISEASES	CLASSIFIED.	AGES.										SEX.		TOTALS.
		0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	Males	Females	
Rickets	..	4	1	..	..	..	..	..	..	..	..	4	1	5
Old Age	33	55	88
Convulsions	14	2	..	..	..	..	..	..	..	8	8	16
Meningitis..	6	5	2	..	..	..	..	..	10	5	15
Cerebral Abscess	2	..	..	..	..	2	2	4
Cerebral Tumour	1	..	..	..	..	25	..	71
Cerebral Haemorrhage	1	..	..	..	..	10	7	17
Softening of Brain	1	..	..	..	..	3	2	5
Hemiplegia	4	3	7
Paralysis..	2	..	2
General Paralysis of Insane	1	..	2
Paraplegia, Disease of Spinal Cord	1	..	3
Myelitis	1	..	1
Disseminated Sclerosis	1	1	2
Locomotor Ataxy	2	..	2
Epilepsy	6	2	8
Laryngismus Stridulus	1	..	1
Cerebro Spinal Meningitis	1	..	1
Peripheral Neuritis	3	..	3
Serous Apoplexy	4	..	4
Meniere's Disease	1	..	1
Otitis, Otorrhœa	2	..	4
Mastoid Abscess	1	..	2
Endocarditis, Valvular Diseases of Heart	28	..	52
Hypertrophy of Heart	1	..	2
Fatty Degeneration of Heart	3	..	5

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.												SEX.			TOTALS.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and over	Males	Females		
Dilatation of Heart ("Heart Disease" (form not stated))	2	3	5	
Rupture of Heart	30	29	59	
Rupture of Blood Vessel	1	1	1	
Aneurysm	4	4	4	
Embolism, Thrombosis	1	1	1	
Atheroma	1	1	2	
Arteritis	1	1	3	
Angina Pectoris	2	1	3	
Bradycardia	1	1	1	
Varicose Veins	1	1	1	
Gangrene, Senile Gangrene	4	3	5	
Syncope	3	3	6	
Tracheitis	1	1	1	
Laryngitis	2	2	5	
Acute Bronchitis	29	30	59	
Chronic Bronchitis	18	20	38	
Bronchitis (form not stated)	24	35	59	
Broncho Pneumonia	31	16	47	
Pleuro Pneumonia	1	3	4	
Pneumonia	24	22	46	
Pleurisy, Empyema	3	2	5	
Empyema, Asthma	2	2	4	
Bronchiectasis	1	1	1	
Hæmoptysis	1	1	1	
Bronchorrhœa	1	1	1	
Cirrhosis of Lung	1	1	1	
Edema of Lungs	1	1	1	

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.										SEX.			TOTALS.
	0 to 1	1 to 5	5 to 15	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	Males	Females		
											Upwards 96 and 95	Upwards 96 and 95		
Tonsillitis	1	...	...	...	...	...	...	...	...	1	...	1	1
Pharyngitis	1	1
Stricture of Esophagus	2	...	2	...	...	...	...	...	6	6
Ulcer of Stomach	1	...	...	...	1	...	1	1
Ulcer of Duodenum	1	...	...	...	1	...	1	1
Hæmatemesis	1	...	1	...	...	1	...	1	3
Dyspepsia	1	...	1	...	1	...	1	2
Dilatation of Stomach	1	...	1	...	1	...	1	2
Pancreatitis	2	1	...	...	1	...	1	3	...	1	...	1
Gastritis	4	2	...	...	1	...	1	...	1	...	7	3
Gastro Enteritis	2	1	...	1	...	1	...	1	2	...	5	10
Enteritis	1	2	...	1	...	1	...	1	2	...	3	5
Appendicitis	1	2	2	1	2	1	...	...	...	...	6	11
Peritonitis	1	1	1	...	1	...	1	...	1	...	1	1
Perforation of Bowel	1	1	1	...	1	...	1	2	...	...	2	5
Obstruction of Intestine	1	1	1	...	1	...	1	1	1	...	1	7
Intussusception	1	1	1	...	1	...	1	1	1	...	1	2
Hernia	1	1	1	...	1	...	1	1	1	...	1	2
Cirrhosis of Liver	1	1	1	...	1	...	1	1	2	...	14	7
Hepatitis	1	1	1	...	1	...	1	1	1	...	1	5
Jaundice	2	1	1	...	1	...	1	1	1	...	2	1
Atrophy of Liver	1	1	1	...	1	...	1	1	1	...	1	3
Fistula of Liver	1	1	1	...	1	...	1	1	1	...	1	1
Enlarged Liver	1	1	1	...	1	...	1	1	1	...	1	1
Addison's Disease	1	1	1	...	1	...	1	1	1	...	1	2
Exophthalmic Goitre	1	1	1	...	1	...	1	1	1	...	1	1

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.										SEX.		TOTALS.
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	Males	Females	
Acute Nephritis	1	2	3	1	1	1	2	...	9	2	11
Chronic Nephritis	3	...	18	18	36
Movable Kidney	1	...	...	1	1	1
Renal Calculus	1	1	3	...	5	...	5
Cystitis	1	1
Prostatitis	2	1	2	...
Enlarged Prostate	1	...	2	...	2
Ovarian Tumour	1	1	...	...	...	...	2
Selpingitis	1	...	...	...	...	1	1
Pyosalpinx...	1	...	...	...	...	1	1
Hæmatocoele	1	...	...	...	...	1	1
Parturition :—													
Placenta Praevia	2	...	...	...	...	...	...	2
Thrombosis	1	...	...	...	...	...	...	1	1
Hæmorrhage	1	...	...	...	...	...	...	1	1
Ostitis	1	...	2	...	...	1	...	...	1	1
Necrosis	1	...	1	...	1	...	2	1	3
Spinal Caries	1	...	1	...	1	...	2	1	3
Suppuration of Knee Joint	1	...	1	...	1	...	1	...	1
Eczema	...	2	...	...	...	...	...	...	1	...	2	...	2
Dermatitis...	1	...	1	...	1

TABLE IX.—CONTINUED.

TABLE 10.

SHOWING MARRIAGE RATE, BIRTH RATE, DEATH RATE, ZYMIC DEATH RATE, AND INFANTILE MORTALITY FOR THE REGISTRATION DISTRICTS OF THE BOROUGH, FOR THE YEAR 1904.

District.	Marriage Rate.	Birth Rate	Death Rate.	Zymotic Death Rate.	Infantile Mortality (Deaths under One Year per 1,000 Births registered).
Whole Borough ...	15.32	26.78	13.83	1.00	114.5
Town Proper ...	18.25	27.14	15.07	1.04	121.6
Portwood and Bitterne Park ...	9.48	25.39	11.84	0.92	91.4
Shirley, Freemantle, and Millbrook ...	13.28	27.01	12.65	0.98	114.8

TABLE 11.

SHOWING NUMBER AND DESCRIPTION OF CASES OF INFECTIOUS DISEASE OCCURRING IN THE BOROUGH IN EACH OF THE FOUR QUARTERS OF 1904.

Disease.	Quarter ending				Total for year	Mortality
	April 2nd.	July 2nd.	Oct. 1st.	Dec. 31st.		
Small Pox ...	1	...	...	...	1	...
Scarlet Fever	54	25	14	20	113	1
Diphtheria ...	40	34	48	36	158	12
Enteric Fever	4	5	4	6	19	1
Puerperal Fever	1	...	1	1	3	3
Erysipelas ...	16	7	11	15	49	3
Total ...	116	71	78	78	343	20

TABLE I2.

SHOWING ALL DISEASES NOTIFIED DURING THE PAST TEN YEARS, AND ADMISSIONS TO HOSPITAL AND HOSPITAL SHIPS, INCLUDING ISOLATION OF CASES IMPORTED BY VESSELS AND REMOVED FROM NEIGHBOURING DISTRICTS.

DISEASES.										1904.																		
1895.					1896.					1897.		1898.		1899.		1900.		1901.		1902.		1903.		1904.				
Notifications.					Admissions.					Notifications.		Admissions.																
Small Pox	11	7	17	17	...	...	22	22	7	7	9	9	3	5	1	4			
Cholera	53	50	146	146	3	190	...	...	133	54	91	61	144	95	239	157	158	119	
Diphtheria	5	6	2	2	4	4	...	...	1	1	...	...	...	...	...	...	...
Membranous Croup	53	82	141	41	41	76	64	230	143	118	87	261	214	427	359	113	109
Erysipelas	352	198	906	268	235	176	294	148	...	116	52	147	87	124	105	148	99	19	23
Scarlet Fever	59	79	169	1	68	188	...	3	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	4	8	2	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	
Measles	
Suspected Plague : Adenitis	
Plague	
Chicken Pox.	
Other Diseases	
Totals	516	204	1140	281	426	151	632	196	755	148	566	286	421	281	819	458	871	343	296

TABLE I3.
VACCINATION RETURNS FOR TOWN PROPER.

Year.	Births.	Succes- fully Vaccin- ated.	Died Unvac- cinated.	Insus- ceptible to Vac- cination	Postponed and whereabouts unknown, or re- moved to other districts and exempt under Sec. 2 nd Vaccina- tion Act, 1898.	Total.
1888	1710	1391	144	1	174	1710
1889	1660	1272	138	1	249	1660
1890	1585	1263	143	3	176	1585
1891	1714	1365	157	4	188	1714
1892	1646	1312	178	8	147	*1646
1893	1701	1407	180	16	98	1701
1894	1796	1495	184	28	89	1796
1895	1874	1558	207	16	93	1874
1896	1912	1575	231	18	88	1912
1897	1886	1577	195	15	99	1886
1898	1847	1485	216	19	127	1847
1899	1802	1421	244	12	125	1802
1900	1751	1412	217	7	115	1751
1901	1821	1496	208	6	110	1821
1902	1739	1459	159	3	111	1739
1903	1697	1446	151	6	94	1697

* One Child had Small Pox.

TABLE 14.

ABSTRACT FROM THE METEOROLOGICAL REGISTER KEPT AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON,
DURING THE YEAR, 1904.

Month	BAROMETER CORRECTED & REDUCED TO 32° AT MEAN SEA LEVEL.			TEMPERATURE.						RAINFALL.			RECORDED SUNSHINE.			REMARKS.			
	Mean at 9 a.m. 9 p.m.		Mean 9 a.m. 9 p.m.	Mean at 9 a.m. 9 p.m.			Mean at 9 a.m. 9 p.m.			Mean at 9 a.m. 9 p.m.			Mean at 9 a.m. 9 p.m.						
	Inch.	Inch.		Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.			
Jan.	29.985	29.977	30.738	22	29.133	14	Deg. 40.3	Deg. 39.6	Deg. 40.5	Deg. 40.6	Deg. 40.1	Deg. 41.6	Deg. 41.2	Deg. 48.8	Deg. 35.8	Deg. 42.3	23		
Feb.	29.622	29.611	30.297	28	28.778	9	46.5	46.5	46.5	46.5	46.5	47.2	47.2	58.4	42.9	60.3	21		
March	30.003	29.984	30.404	11	29.372	29	41.6	41.6	41.6	41.6	41.6	42.9	42.9	50.6	56.3	56.3	27		
April	29.983	29.989	30.259	25	29.427	13	51.2	48.9	48.9	48.9	48.9	52.9	52.9	52.9	52.9	52.9	13		
May	29.981	29.978	30.250	13	29.527	7	55.4	55.4	55.4	55.4	55.4	57.4	57.4	57.4	57.4	57.4	19		
June	30.071	30.054	30.418	22	29.624	25	61.5	61.5	61.5	61.5	61.5	67.7	67.7	59.8	59.2	74.0	12		
July	30.045	30.049	30.249	8	29.649	26	67.9	67.9	67.9	67.9	67.9	73.9	73.9	65.6	87.3	91.7	13		
August	30.048	30.050	30.233	28	29.759	17	65.4	60.0	71.2	53.7	62.4	83.0	3	44.6	25	3140	5550	16	
Sept.	30.030	30.077	30.291	18	29.678	14	57.5	55.0	65.5	48.4	57.0	71.2	5	40.2	30	2500	6880	12	
Oct.	30.125	30.135	30.502	13	29.600	7	51.8	50.6	58.9	46.2	52.5	69.3	18	38.7	15	2438	9225	6	
Nov.	30.119	30.102	30.603	14	29.517	22	41.7	43.2	50.0	37.7	43.8	61.1	11	24.4	27	1056	310	7	
Dec.	29.953	29.982	30.623	19	28.974	12	42.0	42.0	48.0	37.7	42.8	55.3	16	26.7	22	3910	0.860	6	
For the year.	30.002	30.022	30.738	22	28.778	9	51.3	49.5	58.0	44.4	51.2	87.3	17	24.4	27	31.015	0.925	6	
For 10 yrs. 1894-1903	29.991	29.988	30.922	30.196	28.558	10/200	51.8	49.7	58.7	44.1	51.4	89.7	19/7/01	11/1/01	9/1/01	30.668	1.880	11/10/03	159
																	16707	14.9	
																	Oct.	166	
																		11 July.	
																		29/6/94	

This Table has been supplied by the courtesy of COLONEL DUNCAN A. JOHNSON, R.E., Director-General of Ordnance Survey.

APPENDIX C.—CONTENTS.

The Borough Analyst's Report for the Year ending
December 31st, 1904.

ANALYST'S DEPARTMENT.

ANNUAL REPORT for the Year ending 31st December, 1904.

*To the Worshipful the Mayor, Aldermen, and Councillors of the
County Borough of Southampton.*

GENTLEMEN,

I have the honour to submit for your information an account of the work done in this department during the past year.

SECTION 1.—SALE OF FOOD AND DRUGS ACTS.

The number of samples submitted under the above Act during the year 1904 was four hundred and thirteen.

Of this number three hundred and thirty samples were submitted by Inspectors, fifty-eight by private persons, and twenty-five by the Borough of Newbury.

In the following tables the samples from Newbury are not included.

The character of the samples, the number of each article submitted, and the number and per centage of adulterated articles are given in the following table:—

TABLE I.

Character of Articles.	Number of Samples.	Number of Samples Adulterated.	Percentage of Adulterated Samples.
Boric Acid	1	—	—
Butter	79	1	1·26
Coffee	12	—	—
Ginger	8	—	—
Lard	17	—	—
Margarine	3	—	—
Milk	191	15	7·85
„ (Condensed)	2	—	—
Olive Oil	10	1	10·00
Pepper	12	—	—
Sago	3	—	—
Sodium Carbonate	1	—	—
Sugar	17	—	—
Sweetmeats	10	—	—
Tartar, Cream of	9	—	—
Vinegar	9	2	22·22
Whiskey	2	—	—
Wine	2	—	—
Totals	388	19	4·89

The details as to adulterated samples and the proceedings taken, and the result in each case are given in Table II.

TABLE II.

Article Analysed.	No. on Register	Nature and Amount of Adulteration.	Action taken.	Result.	
				Fine	Costs.
Butter ..	125	Adulterated did not contain butter	No proceedings	..	..
Milk ..	8	.. 3% fat def. 2% added water	Summoned	10/-	9/6
" ..	144	.. 12% fat deficient ..	"	10.6	6/6
" ..	185	.. 6% ..	"	5/-	6/6
" ..	202	.. 3% added water ..	"	5/-	6/6
" ..	205	.. 6% fat deficient ..	"	10/-	6/6
" ..	276	.. 7% added water ..	"	40/-	9/6
" ..	p. 1	.. 9% fat def. 22% added water	Private	..	..
" ..	p. 14	.. 23% fat deficient ..	"	..	..
" ..	p. 30	.. 20% fat def. 22% added water	"	..	..
" ..	p. 31	.. 4.5% water added ..	"	..	..
" ..	p. 33	.. 20% fat deficient ..	"	..	..
" ..	p. 34	.. 18% ..	"	..	..
" ..	p. 36	.. 10% ..	"	..	..
" ..	p. 45	.. 3% added water ..	"	..	..
" ..	p. 46	.. 5.8% ..	"	..	..
Olive Oil	p. 47	.. 100% cotton seed oil	Summoned	4/-	*
Vinegar (Malt)	35	.. distilled vinegar ..	"	2/6	*
" ..	36	.. 16% acid def.	"	2.6	*

*These fines included costs and did not pay the Court fees.

The total fines and costs during the year amounted to £6 14s. 6d.

The number of samples analysed during the year is seventy-one more than in the previous year, and is the highest for the thirty-one years the Act has been in operation in the Borough.

BUTTER.

The number of samples analysed is seventy-nine, or three more than in 1903.

One sample only was adulterated.

This sample was purchased at the door of a private dwelling, and a subsequent purchase was genuine.

MILK.

The number of samples analysed exceed by forty-five that in 1903.

The increase in the per centage of adulterated samples is slightly diminished from last year, being 7.85 per cent., as compared with 8.21 per cent. in 1903.

As pointed out in last year's report, adulteration in most cases consists of a deficiency of fat, and is the result of the increased practice of adding separated milk to genuine milk.

This practice is the consequence of the low limit fixed for fat, without any consideration of the ratio which this figure bears to the other constituents of the milk.

COMPOSITION OF THE MILK SUPPLY.

The average composition of the large number of samples analysed is practically the same as that for 1903.

Table showing the average composition of the samples returned as genuine for the past seven years:—

TABLE III.

Year	...	1898.		1899.		1900.		1901.		1902.		1903.		1904.	
Source	..	Inspectors	Private												
Total solids		12.56	12.33	12.72	12.93	12.94	12.66	12.55	12.71	12.75	12.78	12.79	12.66	12.63	12.76
Fat	...	3.87	3.60	4.00	4.15	4.30	3.95	3.82	3.98	3.85	4.11	3.80	3.69	3.73	3.88

The general averages of genuine samples were:—

	1898	1899	1900	1901	1902	1903	1904
Total Solids	12.5%	12.74%	12.9%	12.6%	12.67%	12.74%	12.64%
Fat...	3.79%	4.02%	4.24%	3.88%	3.89%	3.74%	3.74%

The averages for adulterated samples during the past six years were:—

TABLE IV.

Year	...	1899		1900		1901		1902		1903		1904	
Source	..	Inspectors	Private										
Total solids		11.41	11.46	10.28	11.29	11.28	10.91	10.91	10.44	11.27	11.11	11.63	11.11
Fat	...	2.97	2.73	2.85	3.25	2.96	3.20	2.90	2.26	2.74	2.31	2.74	2.31

The average composition of milk is taken as 12.5 per cent. of solids containing 4 per cent. of fat.

The general average shown above is 12.64 per cent. of solids with only 3.74 per cent. of fat.

The decrease in the proportion of fat is just as marked in the adulterated as in genuine samples.

This is shown by the figures for 1902 to 1904.

The only other articles calling for remarks are :—

(A) *Olive Oil.*

One sample consisted entirely of cotton seed oil. The vendor was summoned, but the fine did not cover the court fees, being only four shillings including costs.

(B) *Malt Vinegar.*

The two samples of malt vinegar were both distilled vinegar coloured to imitate malt vinegar. One of them was deficient in acid to the amount of 18 per cent.

Here again the fines were less than the court fees, being only two shillings and sixpence, to include costs in each case.

The other articles were all genuine.

GENERAL.

A.—*For Corporation.*

The various departments for which analyses and preparations have been made were :—

Borough Engineer's Department	...	...	...	98
Electric	"	...	...	3
Medical Officer's	"	...	...	117
Waterworks	"	...	...	13
Water for hardness	...	...	..	962
Total	...	...		1193

BOROUGH ENGINEER'S DEPARTMENT.

The principal samples analysed have been sewage in order to try and discover the defective spots in the sewers. The result have been dealt with by the Borough Engineer.

MEDICAL OFFICER'S DEPARTMENT.

The samples for this department consist of samples of water from the (a) Borough supply; (b) Wells supplying Cottages in the outlying districts of the Borough, and (c) from ships frequenting the harbour which have arrived with illness of an infectious character on board.

The water supply from both sources (Otterbourne and South Hants Co.) has been of the highest possible standard of organic purity, and the softening has been satisfactorily carried out by the South Hants Company. The water from this source is however frequently turbid, and sometimes very turbid.

The softening at Otterbourne was carried out with the usual efficiency up to September 3rd when the softening ceased, and the water was delivered at its natural hardness for the remainder of the year.

The average hardness and range of hardness for the South Hants Company, and for the first nine months of the year for Otterbourne is shown in Table V. :—

TABLE V.

SOURCE.	HARDNESS.		
	Highest.	Lowest.	Average.
Graham Road, Borough	14·15°	2·80°	6·40°
Bitterne, South Hants Water Co. ...	12·43°	3·00°	7·60°
Freemantle, (ditto) ...	11·42°	4·26°	8·27°

Since September 3rd the hardness of the Otterbourne supply has been at the natural hardness 16° to 16.5°.

Total sample dealt with during the year:—

Food and drugs—

Corporation	...	...	330
Private	...	...	58
Newbury	...	...	25
			— 413

General analysis, &c—

Corporation	...	...	1193
Private	...	..	69
			— 1262

Total	...	...	1675
			— —

The fees received for analyses during the year were £79 12s. 6d.
The fees outstanding on December 31st, 1904 ... £29 2s. 4d.

I am Gentlemen,

Your obedient servant,

J. BRIERLEY,
Public Analyst.

